

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

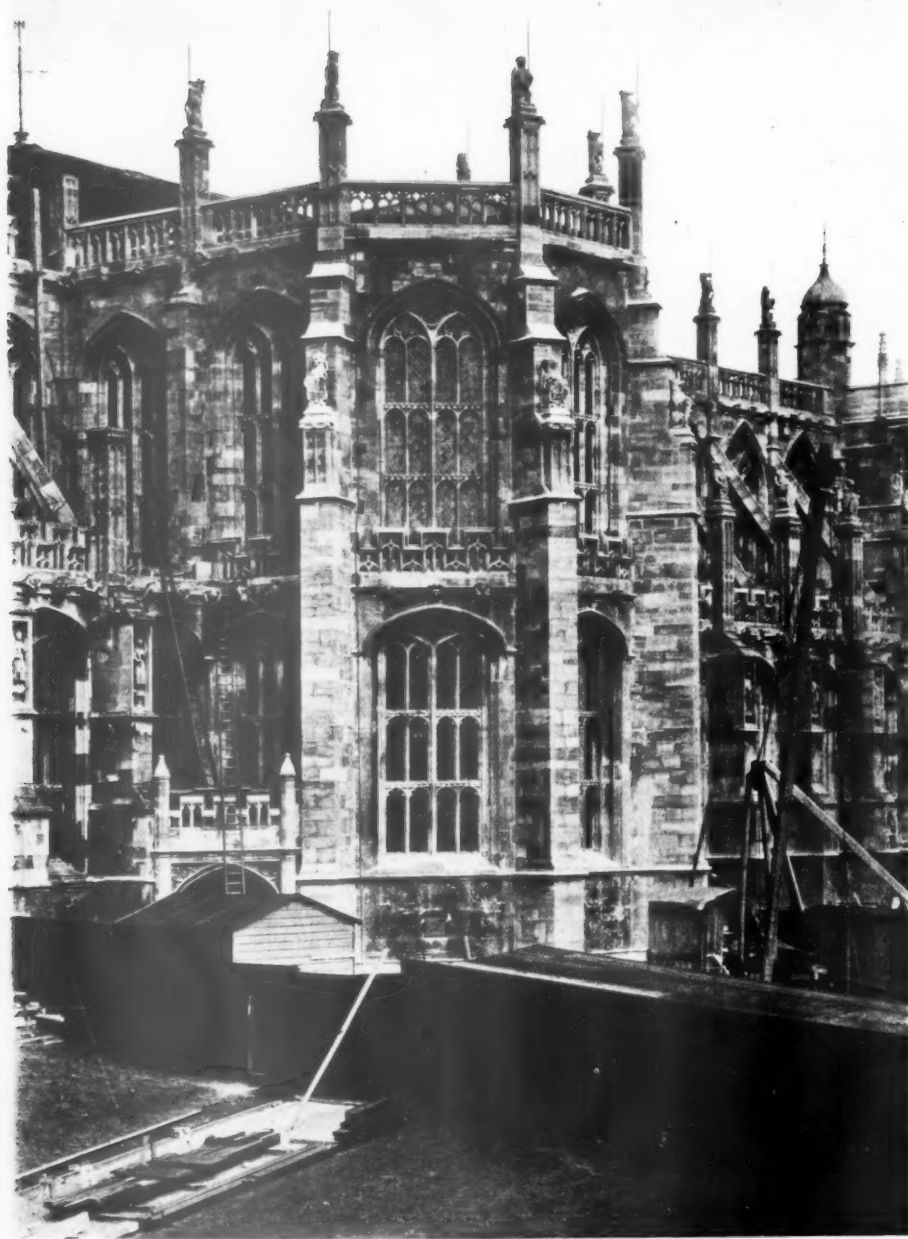
THIRD SERIES

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ST. GEORGE'S CHAPEL, WINDSOR

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VOL. 39. 3RD SERIES

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Journal

It must have been with the profoundest apprehension that many architects read on Wednesday, 27 January, a statement by Sir Percy Simmons, Chairman of the L.C.C. Improvements Committee, on the present intentions of the Council with regard to Waterloo Bridge. It seems that Sir Percy Simmons's Committee is quite unregenerate. Again and again townplanners have repeated what would indeed appear a self-evident truth, that if a new Waterloo Bridge is built with six lines of traffic, one of two things must happen; either there will not be the traffic to fill the lines and the expense will be mere waste, or the presence of added traffic facilities will attract traffic to the bridge and pour it into the Strand at a point already seriously overloaded. There is perhaps a good case for the widening of the present bridge by the corbelling out of the footpaths, or by some other method, to allow four instead of the three lines of traffic possible at present, for three lines produce difficulties of their own apart from traffic load, but that is not the problem raised by Sir Percy Simmons's pronouncement. No scheme has yet been produced to co-ordinate the street development and traffic of central London. *A comprehensive plan is necessary and should be published before departmental decisions about bridges can be received with confidence.*

Charing Cross Bridge, says Sir Percy Simmons, is not to be built: but why, apart from the immediate financial position, is Charing Cross Bridge not to be built? One result of the recent enquiry and research was to emphasise the necessity of this bridge, and to show, not so much the impossibility of any solution, as the existence of many feasible schemes. We hope that before this decade passes we may see, what we all want, work started on *some* Charing Cross Bridge scheme. Waterloo Bridge cannot, however, wait ten years, and is an immediate problem not for traffic and æsthetic reasons, but because every day increases the risk of total collapse. The opinion is often expressed that, however beautiful Waterloo Bridge may be, there is no reason why a modern bridge should not be as beautiful. We agree there is no reason at all; but until

that can be brought into play as an argument it must be shown conclusively, by the production of statistics and plans, that the existence of a six-line bridge is a necessity and that the traffic arrangements on the north bank are planned to cope with the additional traffic. *No figures have yet been produced by the L.C.C. or their traffic advisers to prove either of these.* Until proof is given, most Londoners will feel that the present Waterloo Bridge, possibly widened to four lines, being adequate for present and future possibilities and superlatively beautiful, should be preserved.

The gift of drawings by C. R. Cockerell and F. P. Cockerell, his son, which we recently received from Mrs. F. M. Noel, has now been augmented by a gift from another daughter of F. P. Cockerell, Mrs. Dames Longworth, who has presented to the Institute four drawings by her father, and one most superb drawing in pencil and sepia wash of the Temple of Concord, Agrigentum. These are now on exhibition at the R.I.B.A., and we hope that both members and general public will come to see them. C. R. Cockerell's draughtsmanship, as Mr. Hubert Worthington points out in a review of the drawings in this JOURNAL, is of a rare quality that is seldom (if ever) to be found elsewhere in combination with such full measure of scholarship, sensibility and vigour. Early in his life C. R. Cockerell wished to become a painter, but his father, with a Roman authority quite in keeping with the classical predilections of the son, forbade it. Knowing the result, architects may well thank Samuel Pepys Cockerell, the father, for his decision, for though Cockerell the architect did not submerge Cockerell the painter, as we can see from these drawings, it is almost certain that Cockerell the professional painter would have deprived us altogether of Cockerell the architect and his fine buildings. Cockerell was heart, soul and head in sympathy with classical architecture; he brought into his buildings evidences from all sides of his classic sensibility for form, and to an essentially architectural clarity of thought he added a painter's sense of how to dramatise the commonplace in a monumental way.



PARNASSUS: A Watercolour by Edward Lear, presented to the R.I.B.A. by Mrs. F. M. Noel

The December issue of the *Building Science Abstracts* is now in the press. It includes the name and subject indexes to the 2,500 abstracts published monthly during 1931. Copies of the four volumes 1928-31, comprising nearly 10,000 abstracts, can be obtained from H.M. Stationery Office, or through any bookseller at 10s. each volume. Under the existing economic conditions it is unfortunately necessary to increase the cost of the monthly copy from 9d. to 1s. per single copy. If, however, a block order for 200 copies could be given by the Institute for distribution to members, the present price of 10s. per annual volume could probably be arranged. If the necessary number of members would indicate their desire for such an arrangement, further consideration to it will be given. Those unacquainted with these abstracts should realise that they comprise an exhaustive summary of the world's literature on building and many other arts and sciences. This information is essential for the Building Research Station work, and its abstracts are clearly the easiest practicable way for the private practitioner to keep in touch with the latest advances through the medium of one language.

In an earlier reference in these pages to the subject of Information we stressed the value of the information that individual architects could give to each other by using the *JOURNAL* and the library as "clearing houses" for inconsidered trifles. In moments of perplexity, most of us have searched every nook of memory for the title of a book of reference or for the name of a friend to whom we can turn for information and help; at such times no one will underestimate the value of reliable guidance. Spinlove would have found himself in deep water indeed without the helping hand of his friend Wychete. The

benefit of such timely aid outlasts the occasion for which it was sought, for, in many cases, a difficulty overcome is also a step toward the solution of some future problem. Moreover, it may enable the recipient, in his turn, to come to the rescue of a fellow in distress. A collection of problems, with indications of the effective ways of meeting them, is therefore a real boon to all concerned with them.

We wish now to call attention to the Notes from the Information Bureau of the Building Research Station, which for some time have appeared as a supplement to the *JOURNAL*. These Notes consist of a selection of the inquiries received by the Station and the considered replies thereto. Although the replies relate to specific subjects and are not necessarily suitable for general application to all similar problems, there can be no doubt that they will be of interest and assistance to many beside those for whom they were originally intended.

They cover a very wide range of subjects, and, when a sufficient number of issues has been collected and indexed, will constitute a valuable store of authoritative information on the innumerable questions of building technique with which an architect is faced in the conduct of his practice. The presence of the Notes cannot have escaped the attention of our readers, but mere cursory attention is not all that they deserve. If full use is to be made of this valuable side of the work of the B.R.S. the leaflets should be indexed—a few minutes' work each month, that is assuredly worth while—or even cut up and re-arranged in some classified order, for which purpose we are prepared to supply duplicate copies. When sufficient notes have been issued, we hope ourselves to publish an index to accompany the leaflets.



ST. GEORGE'S CHAPEL, WINDSOR

THE WORKS OF REPAIR TO ST. GEORGE'S CHAPEL IN THE CASTLE OF WINDSOR

BY SIR HAROLD BRAKSPEAR, K.C.V.O., F.S.A., F.R.I.B.A.

A PAPER READ BEFORE THE ROYAL INSTITUTE OF BRITISH ARCHITECTS ON MONDAY, 1 FEBRUARY 1932

THE PRESIDENT (DR. RAYMOND UNWIN) IN THE CHAIR

IT is a difficult task to compress the history of a building that was begun in 1473, and an account of the repairs to it which took ten years to complete, into a paper which is not to take longer than 40 minutes, including the exhibition of lantern slides.

To understand the nature of the repairs that have been necessary at St. George's Chapel in the Castle of Windsor, I must refer, as shortly as possible, to the history of the building.

After the death of King Henry VI in 1471, King Edward IV conceived the idea of building a great new chapel of the Blessed Mary and St. George within the lower ward of the Castle of Windsor. This was to be to the west of the old chapel, erected by King Henry III, which had been rearranged by King Edward III to accommodate his new order of the Knights of the Garter as well as the College of Priests attached to the same.

On 9 February 1472-3 letters patent were issued appointing Richard Beauchamp, Bishop of Salisbury, master and surveyor of the Chapel of Our Lady and St. George and other works to be done in the castle, with licence to choose bricklayers, plumbers,

carpenters, masons and other necessary artisans and labourers, and to take and provide stone, timber, tiles, glass, iron and lead for the same.

The work was immediately set on foot, and its eastern part seems to have been on clear ground; but part of its site included that of some existing buildings, so on 12 June 1475 further letters patent were issued empowering the bishop to remove all the old buildings standing in the way of the new work as far as the curtain walls of the castle.

The work was considerably advanced before this order was made, as in the will of the King, only eight days later, he directs his body to be buried "in the church of the college of St. George within our castle of Wyndesore by us begonne of new to bee buylded."

The building accounts survive from 1478 to 1452, and show that the stone was being procured from Teynton and Milton in Oxfordshire, that the stone for the vaulting came from the former and was called Vowtyngstone, that Caen stone was being imported in casks and that the timber came from the King's forests.

The bishop died on St. Luke's Day 1481, when a stock of the materials then in hand was made; it

includes Teynton stone, Caen stone, and wood for melting the lead for the roofs. There were also ready for use eighteen cases of coloured glass and thirteen cases of plain glass. The stalls were in place in the quire, but lacked the upper parts of their canopies. One Thomas Cancellor, who had been appointed controller of the work some years before, continued the direction of it after the bishop's death.

King Edward IV died on 9 April 1483 and was buried in the lower of the two chapels which he had caused to be made in the north aisle of the quire.

At this time the work completed included the whole of the quire, covered with a wooden roof, and its aisles; two chapels, rectangular on plan, on the sites of the present transepts, and the foundations of the nave.

One of the first acts of Richard III was to remove the body of King Henry VI from Chertsey to Windsor, where he was buried in the second arch of the south side of the new quire.

For ten years there is no existing record of any work being done to the chapel; but in 1495 two large sums were paid out of the privy purse for beheading the chapel. This was obviously for the roofs of the transepts in their present form; the southern of which had been built by Sir Reginald Bray, as a chantry for himself, and is covered with his badge of a hemp bray.

Bray made his will on 4 August 1501 and desires to be buried "in the west ende and south side of the same church within the chapel there new made by me." The will directs his executors, immediately after his decease, to give all the issues of his lands to perform the "new werkes of the body of the church of the college of Oure Lady and St. George . . . and the same werke by them trooly and thoroughly to be perfourmed and finished accordyng and after the fourme and extent of the fundacion thereof, as well in stone werke, tymber, ledde, iron, glasse and alle other thinges necessary and requisite for the utter perfourmaunce of the same."

The work to the nave was then pushed on. It was at first intended to have been of only six bays, but during the progress of the work the design was changed and the present westernmost bay, with its flanking chapels, was added. The whole nave, with its vaulting, was completed before June 1506.

On 5 June 1506 a contract was entered into between the Knights of the Garter and John Hylmer and William Vertue, freemasons, to "vaulte with freestone the roof of the quire of the College Roiall of our Lady and St. George within the Castell of Wyndsore according to the roof of the body of the

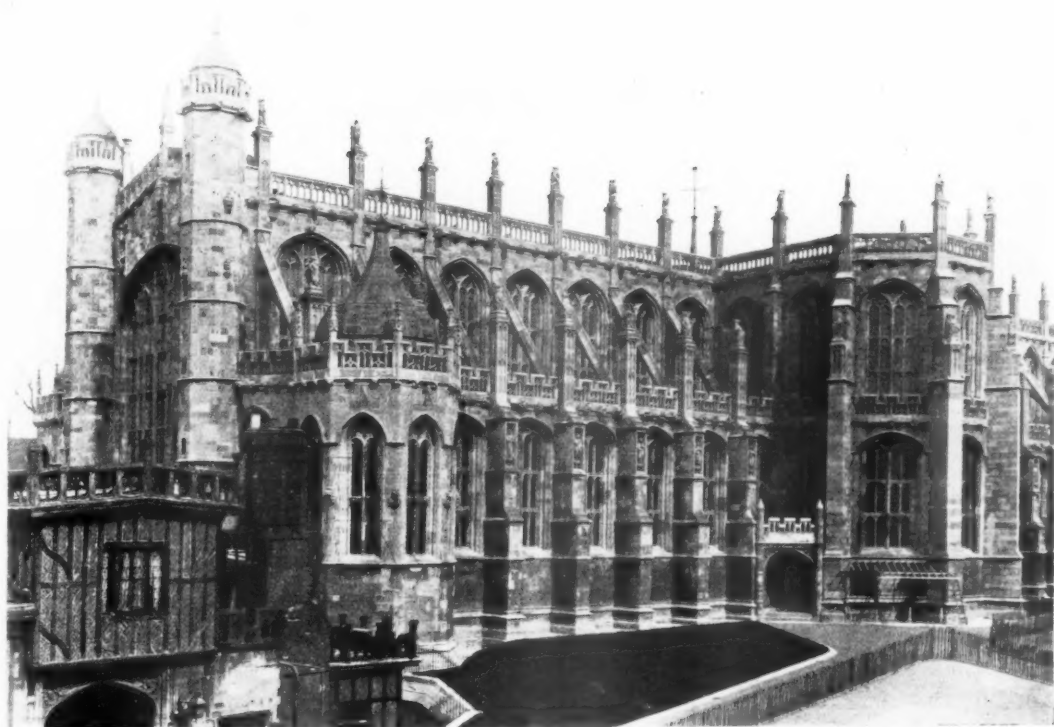
said College there, which roof conteynith VII seve-reys, as well the vaults within furth, as archebotens, crestys, corses and the King's bestes stondyng on theyme to bere the fanes on the outside of the said quire . . . provided alway that the principall keyes of the said wawte from the high awter downe to the King's stall shall be wrought more pendaunt and holower than the keyes or pendaunts of the body of the said college . . ." To which work the masons bound themselves in £400 to find all labour and materials, and finish the same by Christmas 1508. The work, however, was not finished until 1516 owing possibly to the men being required more urgently at Westminster.

A commission visited Windsor in 1515 to report upon the suitability of the nave of the chapel as a fit burial place for the King. After which it was ordered that the new knights should help towards the work that had yet to be done in the same way as other knights had done in the time of King Henry VII.

This work consisted of the pulpitum between the quire and crossing and raising an open lantern over the crossing, towards which, in 1523, £393 6s. 8d. had been subscribed. The weight of the lantern caused such defects to show themselves in the sub-structure that all that which had been built was taken down and the crossing was vaulted in 1528 in line with that of the rest of the church.

The extreme flatness of the vaulting and the lightness of the supporting buttresses must have been a source of danger from the first. The outward push of the vaulting thrust out the side walls of both quire and nave, and this was increased by the failure of the crossing arches. The vaulting split along one of the longitudinal joints from end to end of the quire and also to a lesser extent in the nave. The transept vaults, though not so flat as the others, thrust out the walls to an even greater extent, from lack of any abutment at the angles. Owing to the poor quality of the stone, the flying buttresses, the pinnacles, and the open parapets decayed so rapidly that within 150 years of the completion of the chapel the whole was in a very dilapidated condition.

Sir Christopher Wren was then consulted, and he made a careful report upon the building, with recommendations for its repair. Some of the main tie-beams over the quire had rotted at the ends through leakage of the gutters; one was broken in two, and the same conditions were found in the nave and transepts. The gutters were sunk and defective, the lead of the roofs was much soldered, and there were no down-pipes from the main roof on the south side. There were several cracks in the vaulting; the battlements



ST. GEORGE'S CHAPEL FROM THE SOUTH WEST AFTER THE REPAIR

were loose and some fallen; the beasts of the pinnacles were mostly broken, and some had fallen into the gutters; many of the window mullions were broken, and the foundations of the north side received damage from want of drainage. He recommended that the roofs be mended by "an ingenious and careful man," who was to secure one bay after another, and the broken beams were to be secured by screwed bolts; the lead was to be recast and the new lead required was to be of soft lead so as not to "crack with the sun"; the cracks of the vaulting were to be wedged up and pointed; the broken mullions were to be pieced; the battlements were to be repaired; the beasts on the "west body" of the church were to be taken off and replaced by "Pineapples," and in future some servant of the church should view the roofs and cleanse the gutters, as "one shilling seasonably expended prevents great charges and sometimes incurable damages in such fabrics as this, where the buttments are too nice and tender and may easily give way to the

vault which the architect hath designed with boldness enough low and flatt to ostentation, as I can demonstrate having taken with care the section of the church for my own satisfaction. Yet I judge he hath done what is just sufficient if it be well maintained." In consequence of this report certain of the recommendations were carried out, but they could not have been very extensive as they were all completed within twelve months.

Considerable works of repair were done in the reign of King George III, which were ordered at first to be carried out gradually upon an expenditure of £100 a year! In addition, a new east window was placed over the altar and a new altar-piece was painted. The King gave the great organ, for which the present gallery of Coade's artificial stone was made. The church was repaved, the bosses of the roof were painted and the windows repaired. From 1776 to 1792 over £21,000 was spent upon the chapel.



NAVE FLYING BUTTRESSES ON NORTH SIDE

In 1841 Edward Blore was asked to make a general survey of the chapel, and the chief work consequent upon this was the renewal of the stonework of the west window and the repair of the glass.

In 1877 a general scheme of repairing the outer stonework was undertaken under the direction of Sir Gilbert Scott, and this embraced the renewal of the parapets, pinnacles and carvings upon the cornice; but nothing was done to rectify the grave condition of the vaulting or flying buttresses.

In 1883 the nave vaulting was in such a dangerous condition that Mr. J. L. Pearson was asked to report upon it, and repairs were carried out under his direction by John Thompson, of Peterborough, at a cost of £2,134.

Upon the death of Mr. J. T. Micklethwaite in 1907, I was appointed consulting architect to the Dean and Canons. A small sum was being spent

yearly upon the most urgent matters, but it was soon evident that the state of the building had got beyond the control of such repairs. In 1912 a report was prepared showing the serious condition of the chapel, but the matter was put off by the Great War. In 1918 a more detailed report was prepared in which the urgency of immediate action was pressed as absolutely necessary for the safety of the fabric.

As a result, the works for the complete repair of the chapel were ordered. The contractors selected for this important work were Messrs. John Thompson and Sons of Peterborough, and they placed the work in charge of one of their most experienced foremen, Mr. William Hopkins; and Mr. R. B. Robertson, M.V.O., the Chapter Surveyor, acted as clerk of works.

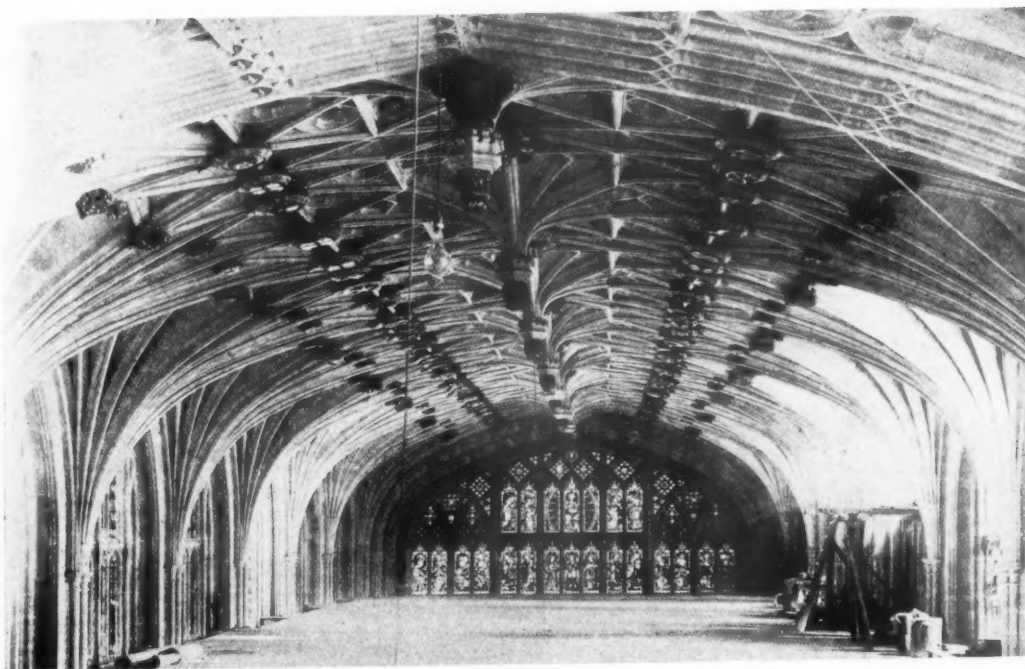
Operations were begun in December 1920, and the repairs of the flying buttresses on the south side of the quire were undertaken. Shores and centering were fixed to all the flyers and then one was dealt with at a time. The stone of each had so completely perished that it had to be entirely renewed.

In the early part of 1921 the nave was fitted up for services, the great organ was taken down and the whole of the quire and transepts was given over to the contractor.

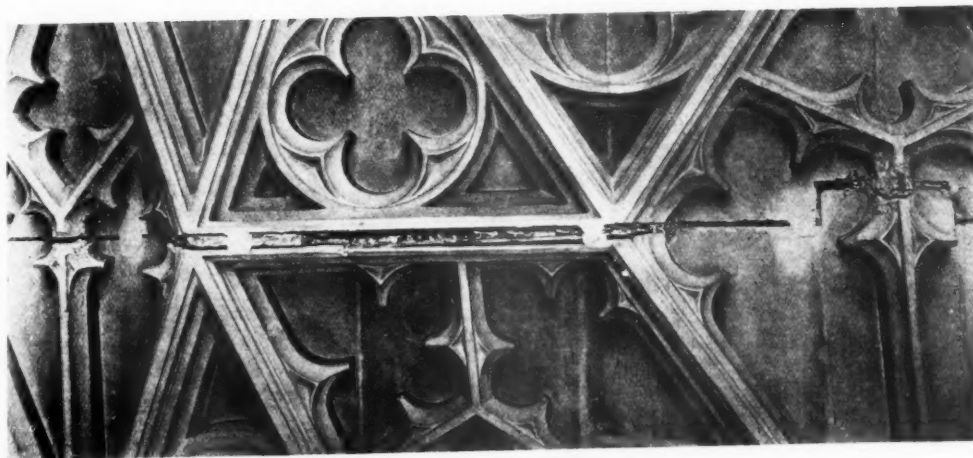
The flying buttresses on the north side of the quire were then rebuilt. Those over the Royal pew were at a flatter pitch than the rest and abutted so far up the supporting pinnacles as to be dangerous. In addition, that opposite the turret to the pew was actually tied back to the quire wall with an iron bolt and had no abutment whatever. Owing to the precarious condition of the quire vault, it was considered that the new buttresses should be similar to the rest so as to give equal support on either side of the quire.

The repair to the timber roof over the quire was then undertaken; but before this was begun a heavy staging was placed within the quire upon which any required centering to the vaulting could be supported. The roof was formed with great tie-beams carrying a low-pitched truss, with two purlins on each side, and had curved braces beneath at either end. Wren's cross braces remained to all except the 2nd and 8th principal, the tie-beams of which had been renewed in pine. With the exception of these two beams, the remainder had completely rotted away at the ends and in no case rested directly on the walls.

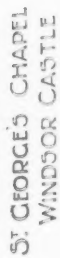
The method adopted to repair the tie-beams was



QUIRE VAULTING AFTER REPAIR



QUIRE VAULTING, SHOWING THE CRACK THAT EXTENDED FROM END TO END, WITH WREN'S LEAD FILLING



CROSS SECTION OF QUIRE, LOOKING WEST.



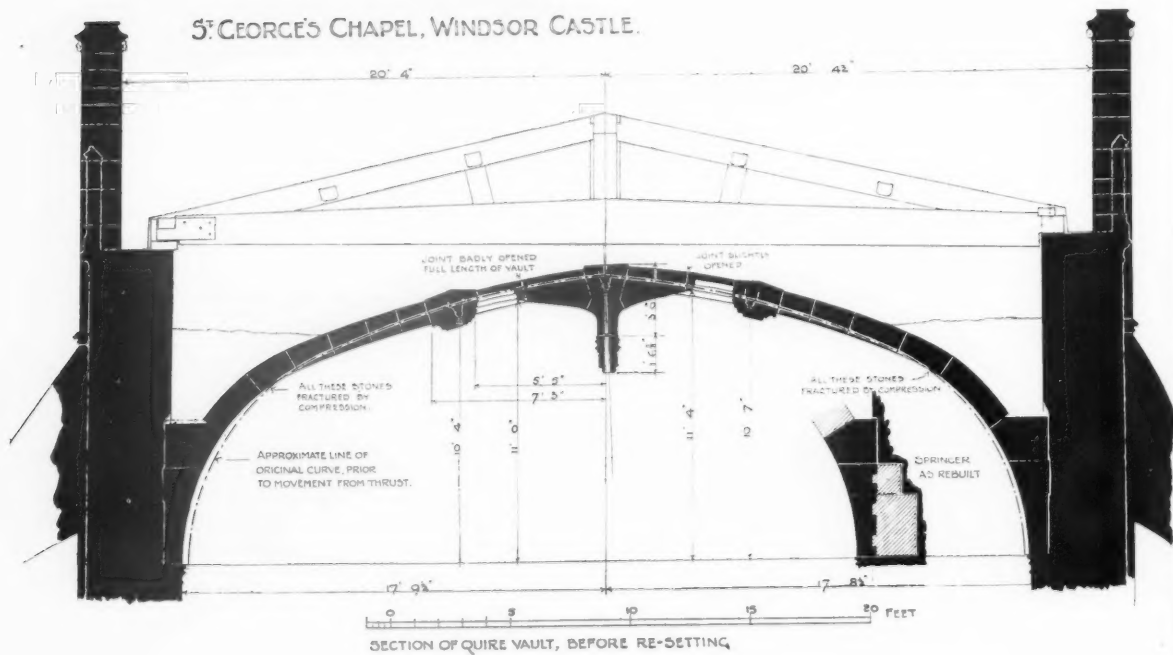
QUIRE : VAULTING BEING RESET, AND END OF REPAIRED TIE BEAM



QUIRE : TOP OF VAULTING SHOWING CRACKS BEFORE REPAIR



SOUTH TRANSEPT: MAIN WALL OVER VAULTING



to place a heavy steel joist, supported on the side walls, over each principal as it had to be treated. The tie-beam was then slung up to the joist, the ends were scarfed and secured with bolts to new cantilevers on the underside and when completed was lowered back into its place.

The death-watch beetle was found active in most of the beams. One beam had so completely perished that it had to be renewed, and this new beam is 41 feet long by 2 feet deep and 15 inches in thickness. The repairs to the timber roof were finished in August 1922.

The stone vaulting over the quire was a matter of grave anxiety, first as to the reason of its movement, and secondly, as to the methods that should be adopted to secure it in future.

The vault is of peculiar design, apart from its flatness; two-thirds of its span on either side is formed of ribbed vaulting and the remaining third is a barrel of the lightest description, with heavy stone pendants in the middle of each bay. The vault was inserted without any bond being made with the side walls, and the whole weight was carried at each springer upon an area of only 95 square inches. It had pushed out the walls about 3 inches, and had dropped 6 inches in the middle. The barrel portion had a great fissure from end to end, and the joints of it had ceased to function as abutting surfaces of an arch. The south side had given over more than the north, and the reason for this was found to be a weakness in the foundation of the aisle wall, owing to the footings resting on soft clay some 18 inches above the solid chalk, whereas on the north side they were taken down to the chalk.

The vaulting was in such a condition that nothing could be done to it without its being entirely reset, but before this was possible, the south aisle wall had to be securely underpinned.

While this underpinning was in hand, the general repairs of the stonework were proceeded with, and in connection with this must be mentioned the King's Beasts. As stated, these were put up at the same time as the quire vault, and were found by Wren to be in a much ruined condition. He, appreciating that even the small weight of these should not be removed from the pinnacles, advocated the pineapples. To put back this weight it was decided that the Beasts should be reinstated if funds allowed. In consequence of the generous gift of the late Mr. F. G. Minter, continued by his son, these are now replaced on all the pinnacles of the chapel. The various heraldic beasts of King Henry VII are known, and the same are placed in an intelligent

order showing the claim of that king to the crown both through the Yorkist and the Lancastrian lines. This work has been most excellently accomplished by Mr. J. Armitage from rough sketches supplied by me.

In March of 1923 the work of resetting the quire vault was begun. This consisted of taking down the whole of the eastern bay and half that adjoining. In resetting the vault, though the greater part of the old work has been reused, it was found necessary to insert new springing stones and heavier main ribs. Only one bay was dealt with at a time, and the whole was completed in October 1924.

The vaulting over the crossing followed. This was of similar construction to that of the quire, but it was not found necessary to take down the middle portion of the vault, though the ribbed part had to be reset and the fractured stones removed.

Before the repairs to the transepts were undertaken another problem presented itself. The vaulting of these, though of much less span than the quire, had pushed out the side walls about 6 inches, and as each face is pierced by two large windows without any solid masonry between, the transepts may be said to have consisted of piers of masonry only some $3\frac{1}{2}$ feet square and 55 feet high, with the vaulting perched at the top. There being no possible means of obtaining a proper tie, where the pressure of the vault occurred, it was decided that the only way to render the transepts secure was to erect buttresses at the angles sufficiently large to counteract any possible thrust of the vaulting.

These new buttresses were begun in January 1925, and as the work had to be carried up slowly, to prevent any settlement, it was not until August of 1926 that all of them were completed. Consequent upon the erection of these buttresses, the south porch, built in Portland stone in the eighteenth century, had to be removed and a new porch put across the angle between the nave and transept in which the old archway of entrance was reset.

The repair of the vaulting of the transepts was put in hand as soon as the buttresses were finished, and this consisted of rebuilding some of the ribbed portions; but the middle part was retained and the joints were raked out and pointed. The main walls over the vaulting were little better than a heap of loose stones. These had to be made good, and a band of reinforced concrete was put on the top of the walls, carried over the crossing arches, and now binds the tops of the walls together.

These works were finished at the beginning of 1927 and enabled the quire and transepts to be

reopened for service after they had been in the builders' hands for over 6 years.

As soon as the nave was clear, the timber staging, that had been used in the quire, was placed under the nave vault, but there being a shortage of money at the time the work proceeded very slowly.

The flying buttresses on the north side were renewed, those on the south side having been repaired in 1915.

When the western bay was added, advantage was taken of the natural drop in the ground to construct a subvault beneath it for the use of the chantry priests of the chapels above. The west wall of the south aisle and south-west chapel came over an old chalk-pit, and, instead of carrying the foundations down to the solid chalk, a rough arch was thrown across the pit without any abutment but the chalk banks. This reckless construction had caused defects in the superstructure, and it was urgently necessary to tackle this without delay. Owing to the slightness of the walls and the depth of the soft earth an intricate system of shoring and needling was required. Shores were placed against the outer faces and centering put to all openings. The needling was formed by sinking concrete piers down to the chalk inside and outside of the chapel and placing steel joists on these piers to form the needles under the walls. The foundations were then put in with small sections at a time until the whole was secured.

In September 1928 Lord Woolavington placed at the disposal of His Majesty the King a sufficient sum to enable the repairs to the nave to be properly completed, together with a further sum for rebuilding the organ.

After this the first work to be done was the repair of the timber roof, which was executed in a similar way to that over the quire. Here, however, it was necessary to renew two of the great tie-beams.

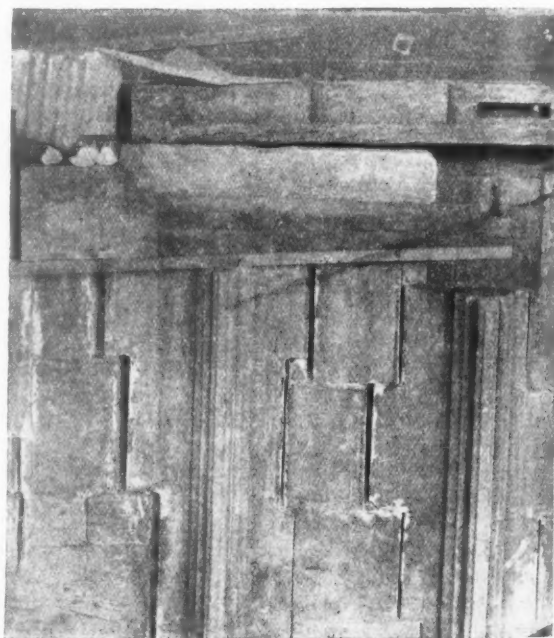
When the timber roof was completed the repair of the vaulting was proceeded with, but as the barrel portion had been partly reset in 1888, and there being no heavy pendants like those of the quire, it was found unnecessary to take down the whole of the vaulting. As it was also made without any bond with the walls, the whole of the arched part on both sides had to be rebuilt and new springing stones and ribs inserted.

The west end of the church had then to be dealt with. Over the haunches of the great window were two bad cracks, and these with the gable above were made good. A band of reinforced concrete was put over the top of the window to tie the side walls together and prevent the window from further spread-

ing. The stonework of the window was that put in by Blore; it was all of Caen stone without any bond with the jambs, and the mullions were each of one stone, on its wrong bed. New bonders were inserted in the jambs and most of the mullions had to be renewed.

The window was filled with a collection of old glass gathered from various parts of the chapel in 1767. It was threatened with destruction in 1782 when the mullions and tracery were to be removed and painted glass similar to that in the east window was actually made. Fortunately, the scheme was abandoned and the stonework was repaired. When the window was remade by Blore, Willement releaded the old glass, introducing some six new panels and all the glass in the tracery. It was necessary again to relead the window, and advantage was taken to arrange the figures in a more connected manner. I was fortunate to secure the help of Dr. Montagu James, O.M., in this matter, than whom there is no greater authority upon the subject of medieval saints.

The upper parts of the two flanking chapels were then repaired and bands of reinforced concrete were put around the tops of the walls and continued over



REMAINS OF LANTERN, SHOWING CRACKS OVER CROSSING ARCH

the aisles. The vaulting was in a very dislocated condition owing to the settlement of the foundations, but this was secured without its being reset. As late as 1709 both chapels were finished with their original ogee-shaped cupolas, and these were removed before 1743; but have now been replaced.

The westernmost pair of flying buttresses appear to have been erected in the time of George III, and their supporting pinnacles overset the walls beneath so that they had no abutment. This has now been obviated by the introduction of concrete blocks resting on the concrete bands round the chapels.

The last work to be undertaken was the parapet on either side of the steps up to the west entrance. These were made in the last century in Bath stone, which had perished to such an extent that the terminating beasts had broken in two and the whole was too far gone to be retained. It was considered advisable to reinstate the work in a modified form, more in keeping with the chapel.

As soon as it was possible for the organ to be reconstructed, it was necessary to ascertain if the gallery built of Coade's cement in 1780 was sufficiently strong to carry the new instrument. This was to be twice the size of the old and be constructed in two divisions at either end of the gallery with a gap between so that the vaulting of the church could be seen without interruption. The gallery was found to be made round a skeleton of iron rods none more than $1\frac{1}{4}$ inches square, without any solid foundation, and totally inadequate to carry the new organ. New foundations were made, the front and end arches were reconstructed in stone, steel joists were put at the back between the plaster panelling and the quire

stalls, and a steel framed floor was introduced so that the whole weight of the organ is carried by the new work. The organ cases were made as far as possible with the material of the old case, designed by Emlyn in 1780, but a considerable amount of new material was required.

As soon as the works were completed in the nave the staging was removed and the whole chapel given over to the cleaners, who took over two months to accomplish that task.

The chapel was formally opened on 4 November 1930, in the presence of their Majesties the King and Queen, members of the Royal Family and the Knights of the Garter.

After the ceremony a number of small matters had to be done, and the contractors' men finally left the work on 12 December 1930, exactly ten years from the date of their arrival.

In conclusion, I wish to record my appreciation of the manner in which the works were executed by the contractors, Messrs. John Thompson & Sons, of Peterborough; my thanks to their foreman, Mr. William Hopkins, for his constant care and skill; and to Mr. R. B. Robertson, the clerk of works, for his regular attention to the works and especially for taking all the excellent photographs from which the slides have been prepared. And my grateful thanks to my friend Sir Giles G. Scott, with whom I was allowed to consult, for his help in settling three very difficult questions of construction that had to be met; and particularly to the Dean and Canons of Windsor for their sympathetic support at all times during the progress of the works, which helped in no small measure to its ultimate completion.



Vote of Thanks and Discussion

The President then called on Dr. Cranage to propose the vote of thanks.

The VERY REV. D. H. S. CRANAGE, Litt.D., F.S.A. [*Hon. A.*] (Dean of Norwich): Mr. President, ladies and gentlemen, I think that probably the feeling which is uppermost in our minds at the end of this delightful lecture is one of profound relief that this great building has been saved, and that the man has been raised up who could save it. When you think of the disasters which have happened in the past, in our own country and elsewhere, simply for lack of care and lack of the right man, it brings home to us the thankfulness we must all have that we have been spared a similar disaster here. Some of you, I have no doubt, were present a few years ago when we had a wonderful paper on the repairs of Lincoln Cathedral, by Sir Francis Fox, the great engineer; I was reminded of that to-night and of the prophecy which Sir Francis made about the Campanile of St. Mark's, Venice. He went to Venice and took the gravest view of the condition of the Campanile, and he wrote a very strong letter to the King of Italy, saying that the tower might possibly last a year, but would not last longer. The King of Italy did what a man in that position was practically obliged to do; he had a number of Italian architects go and look at the tower, but they said they did not see that it was in such a serious condition as Sir Francis said. Nothing was therefore done. And it was a year, almost to the day, that that great tower came down. Here we have had a building closely connected with Royalty, just as St. Mark's was at Venice which was referred to the King of Italy; but, fortunately, we have had a King and an architect who took a serious view of the position and who took early steps to see that it was remedied.

I feel in rather a false position from one point of view to-night, because I have not yet had the opportunity of seeing the finished work; but in the early days Sir Harold kindly invited several of the Fellows of the Society of Antiquaries to go over the building and to hear what he proposed to do. I was a non-technical member of the party, but I was naturally very interested. I do not think he wanted to have a holocaust of the Fellows, yet when I was on the structure I felt I should not like to do it too often, and I wondered whether it was quite safe. But Sir Harold wanted to bring home to us the seriousness of the position. I remember a friend of mine, a Fellow of the Society of Antiquaries, saying that everything which was being done in connection with the Chapel was thoroughly wrong, and that it would be far worse at the finish than it was at the beginning. History has shown, I think you will agree, that that idea has not been realised. I am sure all in this room had confidence, as had all who made the visit to Windsor on that occasion, that in Sir Harold Brakspear we had a man who knew the job and would carry it out. So our first feeling is one of profound relief and congratulation that the vital structural

alterations and repairs, far more important than anything else, have been brought to such a successful issue.

But our thankfulness does not stop there. You will agree that when an architect has to deal with such an old building and to make certain changes, it is inevitable that there should be new work here and there, such new work is, surely, one of the most serious problems that an architect has to face. Many of us here, either in the position of client or of architect, have had to face this very serious problem, and we know something of the difficulties. We have seen the way in which Sir Harold has carried this work out. In particular, most, if not all, of us admired very much that pretty little staircase he put in. It had a very mediaeval look, and I should have been sorry if it had not. But no doubt Sir Harold will point out things here and there which differentiate from the work of the fifteenth and early sixteenth century.

And there came the difficult problem what to do about the pineapples and the King's Beasts. I am glad that the pineapples should not have been replaced and that the King's Beasts should be. It would have been a bad confession to have had to make if we had not a man to design and carvers to carry out such an important piece of ornamental sculpture, if he had had to put back something of that kind but less detailed and interesting. No doubt in a few years people will say "Look at the wonderful things the people in the fifteenth century did; you can't get modern men to do work like that." Everybody I have spoken to says such things! About Notre Dame in Paris they said the same thing. And yet, as you know, the wonderful gargoyles on that Cathedral were carved by an Englishman in the nineteenth century, under the direction of Viollet Le Duc, yet we are always being told that they are things which no modern carver can approach. I think that most of you here, who have more knowledge of these matters than I have, have known carvers who have this wonderful old English tradition still in their bones, the ability to produce, under the general direction of a master mind, something which has real individuality; and, as far as I can judge from the photographs, Sir Harold's carvers have been working in the old English tradition.

There is another point I would like to make, and that is on the perennial difficulty of the organ on the great pulpit. You know the Cathedral where I have the honour to live, and you have very likely heard, as I am constantly hearing, denunciations of a great big organ being in that place. On the other hand, the Provost of Eton, in his new book *Suffolk and Norfolk*, says that at any rate the organ is in the right place. People say "Why don't you clear away this terrible organ and let us see the building from one end to the other?" We have not to face that question at Norwich, though we may have to do so some day. The organ, like all human things, is getting old and may have to be repaired or replaced at some future period, and then we shall have to

face the question of what to do with it. I have often thought that if we had a beautiful organ-case as we have in the Chapel at King's College, no one would object to leaving it where it is. I said to our architect, Sir Charles Nicholson, "Supposing, one day, we ask you to design a really great work of art, about two-thirds the size of the present one, would you be prepared to do it?" He said he would, and I am not sure that that would not be the right ending. But there is the alternative which Sir Harold Brakspear adopted, of dividing the organ into two and leaving a central space through which you can see the whole vista.

I will not take up your time longer; I will only in a few words express the honour I feel it to be to have been asked to propose a vote of thanks to a man who, surely, is one of the great benefactors of modern England in preserving these great works for future generations.

The PRESIDENT: I will call upon Sir George Oatley to second the vote of thanks. Sir George is, as many of you know, one of those who has had the practical care of a very beautiful church in Bristol, and has had experience of some similar problems, which he was good enough to show some of us when we were in Bristol recently.

Sir GEORGE OATLEY, R.W.A. [F.]: Mr. President, ladies and gentlemen, I feel it a great honour to be allowed to second this vote of thanks. Before I come to my more serious words—which will be very few—I would like to refer for a moment to the report of the dilapidations which was prepared by Sir Christopher Wren. You have heard something about it from the Lecturer, but he had not time to quote it all. But there is one term Sir Christopher uses which seems to have disappeared from dilapidation reports recently, a word which I regard as very forceful. He said, "that rain has been allowed to come through the lead work gutters to such an extent that it has much *damified* the structure."

I do not know which to admire most, the courage displayed in embarking upon this critical and difficult series of operations, or the care, the skill and the success with which they were achieved. Sir Harold Brakspear's lifelong experience, his exhaustive research, and his first-hand knowledge of mediæval buildings fitted him eminently for the task with which he was entrusted, and which we, as professional brethren, are proud to know he carried through, so as to prolong indefinitely the structural stability of the unique National monument about which we have been hearing to-night. I often wonder, Sir, what will be the fate of our ancient cathedrals, parish churches and other mediæval buildings should the coming generations of our profession fail to partake of that spirit which inspired the great builders of the Middle Ages. Mere perfunctory and mechanical study of these great monuments will be of little value; indeed, so intricate, so involved is such a research, that nothing but the passion of that spirit which animated their creators can create and sustain the love, understanding and the patience by which alone intelligent research is possible.

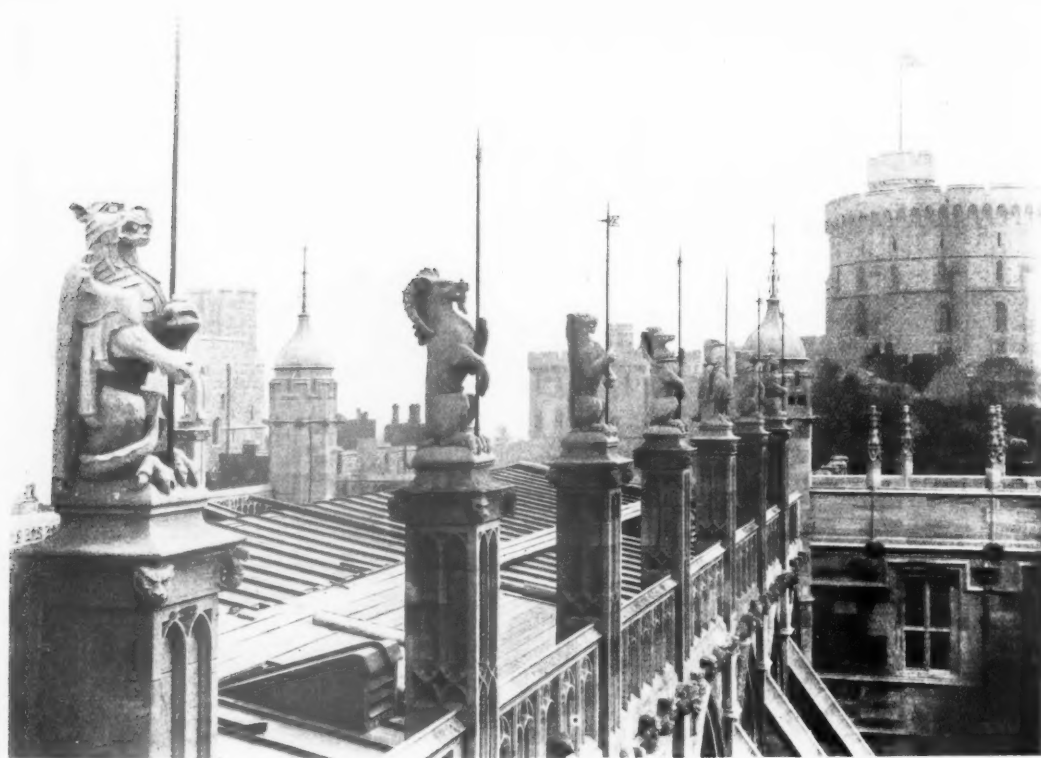
One result of such love, understanding and patience we have seen tonight in what has been put before us.

I have much pleasure in seconding this vote of thanks.

The PRESIDENT then opened the meeting to discussion.

Sir CHARLES PEERS, C.B.E., M.A., [F.]: Mr. President, ladies and gentlemen, we have heard to-night a description of a most hazardous and anxious work. I do not think, from what Sir Harold said, that those of you who had not known the nature of the work in which he was engaged would have realised half of the anxieties and difficulties he has had to undergo and to face. Work of this sort in the present day is work which calls forth the very highest qualities of any architect living, because he has not only to use every particle of technical skill that he has acquired, but at the same time he has that very difficult problem in front of him, that of knowing how far he must subordinate himself to the work that he has in hand. Sir George Oatley was very right when he said that when you are dealing with a great work of this sort, you, if you are a modern architect, are almost obliged to speak, as it were, in a foreign tongue. The problems which the old builders faced, and, indeed, the spirit in which they tackled them, are not those which we have to-day been trained to face. Our methods of construction are in many ways more practical; they leave us freer to do all sorts of things. And, curiously enough, as you will have realised from this paper, with all the enthusiasm and all the love of beauty which you find in these old buildings, there seems to be coupled a most astonishing carelessness. You will have noticed how, when these buildings were built, it seems as if they were laid out according to a great scheme, but with not very much forethought of what was going to happen as the walls rose. I have seen it many times myself, having had much to do with the repair of old buildings. It looks as if, in the absence of any careful setting out of the upper works, the difficulties, as they came up, were faced, or, in some cases, slurred over, and left to take care of themselves. In the case of the vaulting here, particularly in the transepts, it is almost inconceivable that anything could have been put up so carelessly by men who obviously were at the top of their profession, who knew all there was to learn in those days, yet, as we have seen, the springers were set up without any bond, and the walls built in the clumsiest way, not fitting to the substructure; and there they remained precariously until we, in our own days, have been forced to undertake the hazardous work of correcting the faults of those who built them.

It is not a work which any man would willingly undertake, as you will understand. How near the great choir vault was to collapse when Sir Harold was centring it, probably he alone knows; at any rate, it did not collapse, and now we can congratulate him on a very skilful piece of work, how skilful and anxious none but himself probably realised, and he—a man I have known for



THE KING'S BEASTS ON SOUTH SIDE OF QUIRE

many years—is a great deal too modest to tell you what he thought about it.

I heartily associate myself with the vote of thanks which has been moved, for this very notable and famous work.

The REV. A. C. DEANE, M.A. (Canon of St. George's Chapel, Windsor): Mr. President, ladies and gentlemen, There is one very trifling—I will not say correction—addition to the paper which, in the interests of accuracy, I want to make, namely, that the dedication of the Chapel from the first was not only to St. George and St. Mary, but also to St. Edward the Confessor; that was the original dedication of Henry III Chapel, carried on by Edward III when he altered it and transferred to the new Chapel. That is why the various points in the glasses and bosses show the traditional Arms of Edward the Confessor to-day. It is a common error. And I am not sure that one sentence used by the Dean of Norwich might not lead to an idea in that direction.

It is commonly understood that St. George's Chapel belongs to the King. It does not; it is not his property in

any way. The Chapel itself, and all the buildings inside that part of Windsor Castle, including 24 freehold houses, are freehold property of the Dean and Chapter of Windsor, and have been from the beginning. That increased the difficulty of the Dean and Canons, because people often imagine, when anything goes wrong with St. George's, that the Privy Purse provides the money by which it can be put right. But, unhappily, that is not so.

I am glad to be here to speak on behalf of the Dean and Canons of Windsor, and to say how enormously grateful we are, in a special way, for the magnificent work which Sir Harold Brakspear has carried through, and how glad we are that the work has been taken to its conclusion in days which were not so financially stringent as those through which we are passing at the present time.

And, besides thanking Sir Harold, the other thing I want to say—again on behalf of the body to which I belong—is how delighted we are to have people come to view the Chapel. The only point I want to warn you

about is that the Chapel is closed on Fridays, for cleaning purposes. And when you come to see the Chapel, if you will knock at my door—which has a plate on it—I shall be pleased to see you. It will be a real pleasure to show any of you round if you care to come.

Mr. ROBERT B. ROBERTSON, M.V.O. (Chapter Surveyor, Windsor Castle): Mr. President, ladies and gentlemen, I have been taken by surprise by being asked to speak. I am not accustomed to public speaking, and feel rather tremulous in attempting to address an audience such as this. For nearly twenty years I have been associated, in a humble way, under Sir Harold Brakspear, with St. George's Chapel, and during the last ten years more closely, that is to say, during the time the great reparation works were going on. The longer I have known Sir Harold—I do not mind saying this before his face, as I have many times said the same thing behind his back—and the longer I have been associated with him, the more I have come to admire his knowledge, his skill, and especially his thoroughness. With all due respect I say that I feel sure there is no better man in England for such a job as he has carried through at Windsor than my friend Sir Harold Brakspear.

Mr. WALTER TAPPER, A.R.A. (Past President): Mr. President, ladies and gentlemen, I am sorry I came late, so that I had not the pleasure of hearing the first part of Sir Harold Brakspear's paper. It is a great pleasure to me to associate myself with this vote of thanks to him.

There is only one thing I want to say; in regard to the remark of the Dean of Norwich about the organ and the fact of not being able to see from end to end of the building, I am not suggesting that it is not a good thing to see from end to end of St. George's Chapel, but to be able to do so is contrary to the principles of Gothic architecture. The essence of Gothic architecture is mystery; it is to see one thing behind another, gradually opening out to the view, to see one thing through or by way of another. That is the great difference between, for instance, St. Paul's Cathedral and Westminster Abbey. In one case, that of the Abbey, there is the sense of mystery which is communicated to one in such a building. It would be very difficult for one to make a plan of Westminster Abbey off-hand, but there would be no difficulty in doing that in the case of St. Paul's.

The Dean of Norwich, in the course of his remarks, said there might be an organ very much larger at Norwich; I am not sure that that is a sound thing to suggest. I have noticed very often—and at Eton College I noticed the other day—that the size of the original organ had been increased by adding two big towers. It did not improve the scale of the Chapel.

I wanted chiefly to accentuate and emphasise the fact that of being able to see everything at once in a Gothic church is contrary to the great Gothic tradition.

I am very glad to be here to-night and to associate myself with the vote of thanks to Sir Harold Brakspear for his paper. I had the pleasure of going down there

when the work was being done, and it has been completed splendidly, as far as I was able to judge.

The DEAN OF NORWICH: I hope I may be allowed a word of personal explanation. I carefully avoided giving an opinion as to whether this vista was desirable or not; I quoted the Provost of Eton on one side, and I quoted the remarks I am constantly hearing on the other. I did not give my own opinion.

I am afraid I do not know what Mr. Tapper meant about the organ being larger; anyone who knows our organ at Norwich would not wish it to be larger. But there is much to be said on both sides on this vista question.

The PRESIDENT then put the vote of thanks to the meeting.

It was carried by acclamation.

Sir HAROLD BRAKSPEAR (in reply): It is most exceedingly kind, and I feel very much the appreciative words of the proposer and seconder, as well as those of the supporters of this vote of thanks. Mr. Tapper's remarks are rather side-tracking, but they are almost word for word, those in which I was going to reply to the remarks of the Dean of Norwich. I had nothing whatever to do with enlarging the organ at St. George's Chapel, Windsor, I would rather have left it the size it was before. But as it was deemed right to make it twice the size it was before, the only way out of the trouble was to put it out at each side, where it could not be seen. That is the sole reason, as far as I am concerned, why it was there.

I was touched by what Sir George Oatley said about the love of old work; I am certain that unless one has the love of this old work, something will happen in the future, because I do not see how our young Fellows are to carry on the traditions and the proper repairs of the past work unless they devote more attention to it than seems to be the case at the present time. I speak feelingly because I have a boy who is entering the profession, and I feel that with the new study of construction, and the materialistic part of the business, that this side issue, if you so call it, of the repair of old work may come hopelessly to grief unless we can instruct our boys better than they are being instructed at the present time.

Sir Charles Peers touched on a point which I did not say anything about. We have known each other for many years, and he knew the grave anxiety it was to do this work. I do not mind telling you, now, that at one time, for three weeks, we were not certain whether we should get up our centring in time to that choir vault, or whether the vault would fall. And you can imagine the anxiety we had in those three weeks; it was very considerable, not only for myself, but also for the Dean and Canons.

Mr. Robertson has also said nice things. I have always worked happily with him. We have been many years in association at St. George's, and I am always very glad to have him to work with me, and to have his help. I thank you very much indeed.



A FRONTISPIECE TO A PUBLIC BUILDING. Charles Robert Cockerell

Drawings by Charles Robert Cockerell, R.A.

A NOTE ON THE DRAWINGS AT PRESENT EXHIBITED AT THE R.I.B.A.

BY J. HUBERT WORTHINGTON, F.R.I.B.A.

It is difficult to write about draughtsmanship, for its appeal is to the eye. The object of these notes is to urge people to come to Conduit Street and study this notable accession to the Institute's collection of drawings. There is much to be learned from them. At the moment the name of Charles Robert Cockerell is enveloped in the mists with which most of us try to blot out the nineteenth century. But the mists will clear away and Cockerell will remain a permanent landmark in architectural evolution.

Those who take the trouble to examine these drawings with the care that they deserve should begin by looking at the revealing portrait of their author that is one of the Institute's treasures. As scholar, teacher, architect, artist, leader and man he deserves to be remembered, and this generous gift of the works of his hands will help future generations to understand him.

Skill without personality does not carry the architect far. Force and organising ability are of little real worth unless they are transmuted by artistic sensibility. But C. R. Cockerell was one of those rare people who could blend these frequently contradictory gifts to a remarkable degree.

Though the schools are responsible for an immense improvement in the general level of draughtsmanship, there is still a lesson in the distinction that marks the work of so outstanding an individual as Cockerell, and there is nothing to be lost by a little self-criticism.

Painters and sculptors frequently reproach present-day architects for not drawing architecturally, and there is a good deal in what they say. Our efforts at sunset effects, purple cascades, trees, and people arouse in them a mild jocularity. What they appreciate most in an architectural drawing are careful portrayal, fine line, sure perspective, and sensitive rendering of planes by colour. These are the qualities that Cockerell's drawing almost invariably possesses.

Accurate delineation has a beauty all its own.

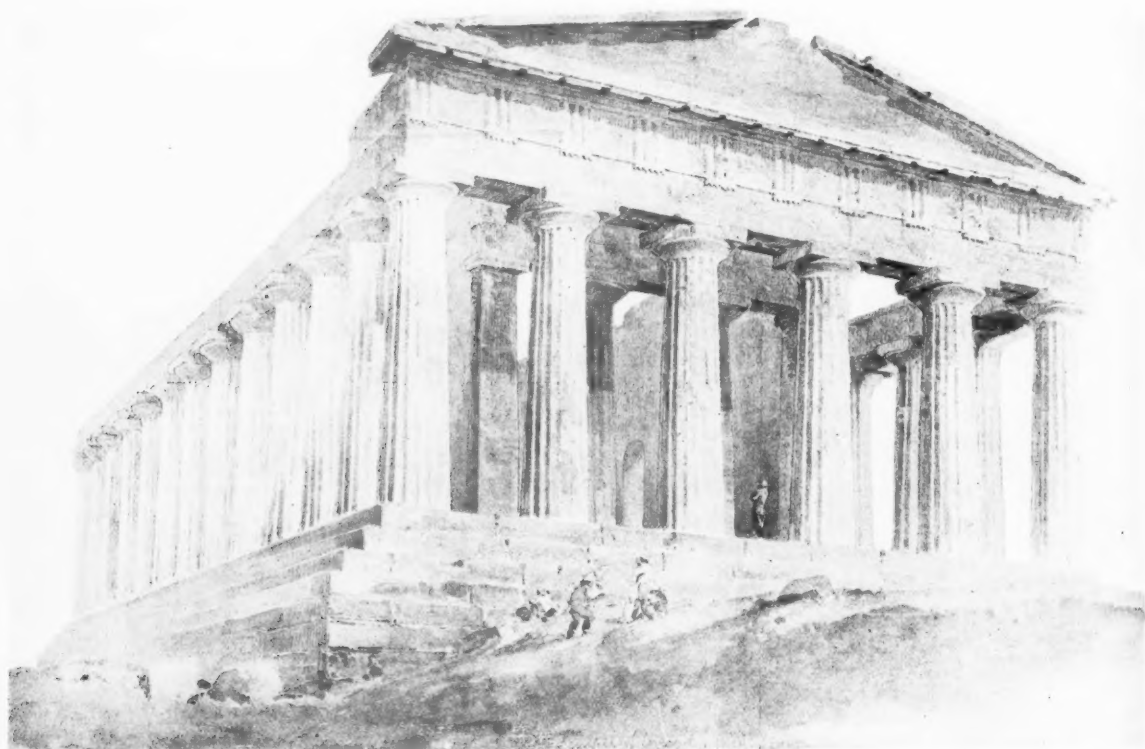
It is curious that the painter so often wishes to draw like an architect, and that the architect, much to his loss, wishes to draw like a painter. David Roberts, of Cockerell's generation, and Randolph Schwabe, Rushbury and Eric Gill of this, have a lot to teach our students.

Some drawings instinctively arouse suspicion, and they are those which we know to be insincere. It is easy to smile and say that it is forgivable to gull examiner, assessor, or client; that a certain amount of "eyewash" is justifiable so long as one gets one's own way. But it is a poor standard to set.

The fine, sane, English sincerity of a Cockerell drawing is like a breath of fresh, invigorating air. It bears a definite relation to a projected building, of which it is a careful study, or it is a sensitive record of some building of the past, as it appears to the beholder, or it forms a fresh and imaginative reconstruction of a ruin, by an expert, for the benefit of students.



WESTMINSTER LIFE AND BRITISH FIRE OFFICE IN THE STRAND (NOW DEMOLISHED)
C. R. Cockerell, R.A., Architect



THE TEMPLE OF CONCORD, AGRIGENTUM

Pencil and sepia-wash drawing, presented by Mr. Dames Longworth

The drawing is more than competent, it is enlivened by a quickening spirit.

It is not proposed to enumerate them all. Some of them are unequal, but all have some quality.

The pencil study for "The Professor's Dream" may be a little mechanical and confused, but it shows the infinite pains that the author took with his drawing, before he brought the magic of his brush to give it the vitality found in the finished coloured drawing lent by the Royal Academy.

The greatest of all his drawings, "A Tribute to the Memory of Sir Christopher Wren," is also on exhibition, lent by Mrs. F. M. Noel.

There is a group of drawings, a little sketch of Segesta, a large one of a "View in Greece," which someone may be able to identify, and the Temples of Concord and Juno Lacinia at Agrigentum which stimulate the imagination and reveal much of the secret of Greek Art. To those who have enjoyed the Temple sites of Sicily and Greece,

these sketches bring back the magic of the mountain setting, the spell of atmosphere, the beauty of the shadows lengthening on Doric flutes, without which Greek architecture is devoid of its real life.

Another group of drawings shows careful studies of classic buildings, "A Greek Temple Restored," "The Parthenon Restored," and "View of the Theatre of Pompeii Restored." No reproduction can convey the subtlety of the colour and washes, the reflected lights, the delicacy of touch, the sense of modelling of these. There is a perspective of one of his own buildings, The Westminster Life and British Fire Office in the Strand, now unfortunately destroyed. It is a model of what a perspective should be, and it is a pity that more architects cannot portray their own designs in this masterly manner.

Finally, there is a vigorous pen and ink drawing of "The Pediment of a Public Building."

The Institute has been enriched by a generous gift. It is to be hoped that many will take advantage of it.



THE THEATRE AT POMPEII AS IT MIGHT HAVE APPEARED IN THE INTERVAL BETWEEN THE EARTHQUAKE OF A.D. 68 AND THE FINAL CATASTROPHE OF A.D. 79. Watercolour by C. R. Cockerell, R.A.

Reviews

THE ADVENTURE OF BUILDING*

A REVIEW BY DR. RAYMOND UNWIN, PRESIDENT R.I.B.A.

There can be few architects who would not like to have had for a client the author of this admirable booklet. In these days, when so much uncertainty exists about financial matters and the values of many investments, there is a special attractiveness in the possession of a solid little home of one's own, with a garden and, if possible, a potato patch; for these are possessions which cannot be spirited away by the vagaries or mistakes of international financiers. Moreover, the possession of a dwelling of one's own has a very beneficial influence towards stability and continuity of life. One may think twice before removing from a rented dwelling, but one thinks many times and long before giving up a house of one's own, particularly if it is of such a character as that described in this booklet, one which can inspire some affection.

The author rightly points out that building is cheap to-day; that it is therefore a good time to build. He goes on to tell those who wish to build a house how they can set about doing it, explaining the procedure all through. He describes the work of the architect, his relations to the builder; how the payments are made; and how the finances can be arranged.

Architects are, in the main, a modest folk, and it runs

counter to their professional instincts to blow their own trumpets. But here is a little booklet in which a well-satisfied client has, quite impersonally, blown the trumpet of architects in general and no one in particular. The most modest and sensitive need not hesitate to hand this booklet to anyone interested, or likely to be interested, in building themselves a house. For those many possible clients for whom in these days a £2,000 house may be an unattainable luxury, it is easy to explain that the booklet is equally true as regards the more modest dwelling which can be secured for half that sum or even less.

To save our country from disfigurement, nothing is more necessary than to secure a better understanding on the part of the public of what it is that the architect can do for his comfort by good planning, and for his satisfaction and pleasure by good design. If this were understood, less buildings would be erected which are a disappointment to those who have paid for them, and an offence to all who must subsequently see them.

I recommend architects to get the booklet and to keep a few copies available for handing out.

The Adventure of Building may be obtained from all booksellers and from the R.I.B.A. or the Architectural Press at the special price, for architects, of 2s. a dozen copies, or 2d. each.

* *The Adventure of Building*. By P. Graham. Pam. Lond.: Architectural Press. [1932.] 6d.

WREN AND HAWKSMOOR

A REVIEW BY THEODORE FYFE, M.A., F.R.I.B.A.

The Wren Society continues its important work. An introductory note by the editors of the present volume, Mr. Bolton and Mr. Hendry, points out that it is a publication of hitherto unknown drawings recently discovered at All Souls, and now Vol. VIII of that collection. Though bearing on the Society's Vol. VII, uncompleted at the time of the discovery, the decision to publish the new material as a separate volume secured a generous contribution from the College. The material is exceptionally valuable for a complete understanding of Wren, as it strikes not only undiscovered, but unsuspected country in the schemes for Whitehall and Greenwich. The introduction speculates on the possible influence of Bernini on the bold design for a Palace for William III, after the Fire had "left Whitehall a mass of ruins," all except the Banqueting Hall by Inigo Jones. There is an illustration of Bernini's design for the Louvre from the diagram made for Sir John Soane's lectures, with its daring but wholly unorthodox rhythm in the columniation of the order treatment. Bernini or not, this volume shows how Wren played with the idea of over-ordered treatments, though his actual work shows no infection from the insidious disease. Wren retained Jones's masterpiece as the centrepoint of his design, but placed an incredible monstrous portico in the centre of it in his first scheme; and though the second scheme left the Banqueting Hall intact, and repeated it, there is other evidence of a certain ruthlessness of scale. The real mastery is evidenced by the lay-out, and the same sureness of handling is seen in the schemes for Greenwich. The first design, with a central domed building blocking the view of the Queen's House, is of great interest. When Wren was forced to get clear of this idea, he was able to produce the beautiful plan shown on Plate XXII.

The rest of the volume is devoted to schemes for Windsor.

There are 35 plates, needless to say, beautifully produced, and Kneller's portrait in the Royal Society forms the frontispiece. Though folding plates are apt to be troublesome, Plate XIX is certainly unfortunate, as it distorts the Greenwich design with the central dome at its most important point.

The editors announce that Vols. IX and X will be devoted solely to the City Churches as Wren designed and built them.

In the nineteenth volume of the Walpole Society, Mr. Geoffrey Webb has an article on the Letters and Drawings of Nicholas Hawksmoor, relating to the building of

the Mausoleum at Castle Howard. Mr. Webb has made the life and work of the English architects of the seventeenth and eighteenth centuries peculiarly his own subject, as those who have the privilege of hearing his lectures at Cambridge—given jointly for the Faculty Boards of English and Fine Arts—know very well. It was no small matter to edit 53 letters of Hawksmoor's, dealing with the involved procedure of the building of the Mausoleum and full of technical references. Mr. Webb, as might be expected, has done the work thoroughly, and his brief commentaries are models of how this sort of thing ought to be done. In a short introduction, he gives a succinct account of Lord Carlisle's building of Castle Howard and the Mausoleum, followed by an illuminating critique on the short-lived English Baroque phase of Hawksmoor and Vanbrugh and its subsequent relation to the academic influences of the Burlingtonian party. This is a great help to the reader in assisting him to appreciate the pithy comments by the editor on the various little troubles which occurred over the building of the Mausoleum, revealed in a veiled way by the letters. Hawksmoor emerges as a great, if slightly pathetic, figure. There are very interesting remarks on various matters connected with classical treatments, showing his knowledge of Vitruvius and of historical examples (see the reference to the Tomb of Cecilia Metella in Letter IV, and the remarkable Letter XX) and other remarks showing what a good mason he was. Thus, in Letter XXVI, dated 15 March 1733:—

"I understand by M^r Etty that the Repairs of the foundatⁿ at Y^e Mausoleum Appears very well and stands well, and that no further settlements or cracks appear, I humbly advise that tho' the masons may be preparing Stone, for that Worke, yet don't let 'em Set any till these new additions are well dry'd by the Spring weather, and y^e out side new worke become more stiff, to help to bear the work above."

And again, in Letter XXXIX, where he is discussing the possibility of constructing the cornice in four stone courses instead of two (which he preferred) because of the quarry sizes available:—

"But in that case there is one thing especially to be observed (or the pressure of the hanging square will snap the modillions off) viz' to lay no mortar between the Modillions and y^e say'd hanging square but let the Joynt be free and open.

"For in all y^e cases of good masonry, the Modilion and the hanging square shou'd be contained in one and the same stone, for the reason above mentioned." By "hanging square," as he explained in the context, he means the corona.

It is difficult to refrain from further quotations, as the whole body of correspondence makes an absorbingly

* *Wren Society*. The Eighth Volume, 1931. Being thirty-two large drawings for Whitehall, Windsor and Greenwich, 1694-1698. Original Wren drawings . . . [found] at All Souls. Oxford: University Press, for the Society. [1931.] (£2 2s.)

* *Walpole Society*. The Nineteenth Volume, 1930-1931. Oxford: University Press, for the Society. [1931.] (£2 2s.)

interesting and valuable document, disclosing not only the mental processes of a great constructive architect in relation to a particular building, from start to finish, but his relations with his client, and his attitude to the men of taste who were in the background (when not farther forward) all the time.

The article is excellently illustrated by Hawksmoor's

lay-out plan (in the text) and by six fine collotype plates, four of them reproduced directly from the original drawings.

The other articles in this attractive publication are on "British Artists in India," and "The Glass-Paintings of Coventry and Its Neighbourhood," both beautifully illustrated.

FRANK LLOYD WRIGHT

MODERN ARCHITECTURE. *Being the Kahn Lectures for 1930.* By Frank Lloyd Wright. Princeton: University Press [1931]. (215.)

TWO LECTURES ON ARCHITECTURE. By Frank Lloyd Wright. Chicago: Art Institute. [193-.]

Reviewed by A. TRYSTAN EDWARDS [A.]

All the world loves a dogmatic writer, and for this reason Lloyd Wright's book is certain to find appreciative readers. For the advantage of dogma is that it expresses a truth, that truth is most attractively presented, and if it expresses an error, that error, inasmuch as it has come out of its shell and stands naked and blatant before us, is most easily refuted. The really tiresome kind of writer is the one who continually fumbles and displays to us a state of literary undress as if he imagined that the laborious process of his making up his mind could conceivably be of interest to us. It is to the credit of Mr. Lloyd Wright that he does not go into print until his ideas are crystallised.

Before examining his point of view it may be as well to cast a glance at some of the aphorisms which are seductively inscribed in pale brown ink on the fly-leaves of this volume. Let me pick out only two of these smooth pebbles of speech:—"Form is organic only when it is natural to materials and natural to function"; and "All forms stand prophetic, beautiful and forever insofar as they were in themselves truth embodied." With what a flourish these statements are made, but, alas! how deceiving they are and what a riot of bad architecture has resulted from a belief in them. For without any disrespect to Mr. Lloyd Wright I may suggest that we have heard these views before. The worship of "function" in architecture, the dotting upon the materials—is not this a reiteration of those fatal doctrines of Ruskin, Pugin and Co., who gave our builders of factories *carte blanche* to design exactly as they liked provided that they designed "truthfully"? But the description of "form" as something which follows automatically from the manifestation of "function" is an error of the first magnitude. It makes design altogether too easy and, indeed, represents a betrayal of the citadel of art, even before a single blow has been struck in its defence. The precious word "organic" is entirely misused if it is taken to be synonymous with "functional," for in the living organism there is a single spirit pervading it and bringing all its parts into a formal pattern, and this attribute of unity is over and above that of function and belongs to a different intellectual order. Were this not so, the thoroughly efficient industrial buildings in our big towns would already be beautiful and there would be no need for the architect to make his appearance at all.

Mr. Lloyd Wright has a polemical chapter entitled, "The Passing of the Cornice," where for sixteen pages he sneers and jeers at this famous architectural feature, apparently oblivious of the fact that the cornice has survived for 2,000 years and adorned countless pieces of architecture during that period precisely because it has an organic quality. The cornice is an

æsthetic punctuation of a building and makes it conscious of its upper terminal. This consciousness is just the kind of vitality which it is the business of the architect to give to a building. While, however, Mr. Lloyd Wright's remarks about the cornice do less than justice to the classic style—and to the Gothic style as well, it may be added—his sturdy independence of mind finds more fruitful expression in his indictment of the skyscraper. He sees in this architectural expedient "a mechanical conflict of machine resources, an internal collision." And, again, he says, "the true nature of this thing is prostitute to the shallow picturesque, an attempt to render a wholly insignificant, therefore inconsequential beauty. In any depth of human experience it is an ignoble sacrifice." And he complains of the skyscrapers that "they have no relation to their surroundings. Utterly barbaric, they rise regardless of special considerations for environment or for each other, except to win the race or get the tenant."

Other chapters, entitled "Machinery, Materials and Men," "Style in Industry," and "The Cardboard House," contain many stimulating ideas. The concluding essay on "The City" describes an Utopia which, although slightly more attractive than that of Mr. Le Corbusier, represents a complete revolt against the civic ideals of the past. In fact, he has given up the city as hopeless and would apparently find refuge in a "Garden City" with one house per acre, a wearisome tract of suburbia planned to be in communication with a factory zone. Even London of to-day, with all its faults, is surely better than that! The noble conception of the street, although it has fallen on bad times, has not yet been completely abandoned by us.

In addition to *Modern Architecture*, Mr. Frank Lloyd Wright has published two lectures entitled *In the Realm of Ideas* and *To the Young Man in Architecture* respectively. The first gives an interesting description of some of his own designs, while the second contains advice to the younger generation. Interspersed with a number of platitudes, we find passages which have a "snap" such as could scarcely characterise the observations of our own architectural preceptors. We may all take to heart the following golden words:—"Beware of the shopper for plans. The man who will not grubstake you in prospecting for ideas on his behalf will prove a faithless client."

QUANTITIES

QUANTITIES. By Prof. B. Fletcher and H. P. Fletcher. 10th ed. By A. E. Baylis. Lond.: Batsford. [1931.] (16s.)

Reviewed by G. FLINT CLARKSON [A.]

The new edition of this well-known and much consulted book will be greatly appreciated, as the format is such as does credit to an architect's library and gives him pleasure in its perusal.

The fresh edition has been prepared by the Senior Surveyor to H.M. Office of Works, Mr. Baylis, who postulates that all surveyors follow the rule of his department of numbering each item; the work, however, is not consistent, as several examples of bills are shown without this useful key.

The book is an extremely useful dictionary of modern practice; it is, however, a pity that, as it is published almost contemporaneously with the new Form of Contract, no reference is made to this, and in fact some of the notes are thereby out of date.

The vexed question of the relationship of Quantity Surveyor to Architect, Contractor and Employer is not dealt with, except in a very interesting chapter on law, where a lot of reading and mental correlation is necessary to get at the facts; this chapter is full of "meat," but the composition and arrangement of this chapter and its marginal headings would be greatly improved by a more connected train of relationship. An author's preface to this section on advisable practice would have been greatly appreciated.

There is apparently no reference to surveyor's fees, nor is the vexed question of who should pay these discussed, nor are the merits of contracts with and without quantities compared. Throughout the work it is implied that the Quantity Surveyor settles certificate payments, but that by his scale he should charge for this work is not hinted at.

The text implies a considerable knowledge of the subject on the part of the reader, and apparently sets out to guide in the matter of detail and not of principle. The introductory chapter is by no means enlightening to the young student, and it would have been much better to have printed here the samples of taking off in script as is done in subsequent chapters. Care should have been taken that examples consistently follow the good advice of cross-referencing, which is omitted from some of the samples of abstract sheets shown.

The book is so good in the matters that it does deal with that it is to be regretted that there are so many aspects of the problem that are hardly dealt with at all; those aspects that occur in the difficulties of daily practice, on which advice would be sought in such a volume, such as: Works to site, shoring, night-work, attendance on specialists, especially general engineering services, and the quantities suitable for country builders, who fail as a rule to understand the detailed measurement of "Labours" and the important subject of the usefulness of quantities on alteration jobs.

The book is greatly to be recommended as a book of reference to anyone with a little knowledge, especially on account of its good index. As a book for study by the student it is verbose, repeats itself, and is none too clearly expressed, and in several places suffers because the opportunity of the new form of presentation has not been taken to recast sufficiently the original text, which sometimes recalls the original date of the book, on a subject which has continually developed and been modified in the course of years.

The book contains useful tables of the history of building costs over the last twenty years, which alone makes it an essential addition to the architect's library of reference books.

THE NATURAL AND ARTIFICIAL LIGHTING OF SCHOOLS

The reports on the Natural and Artificial Lighting of Schools issued in 1914 and 1913 respectively by the Illuminating Engineering Society have been recently brought up to date by sub-committees of the Society, with Mr. P. J. Waldram and Mr. A. Blok as chairmen, assisted by Mr. J. Swarbrick as the representative of the R.I.B.A.

Both reports indicate that few, if any, precise regulations are at present in existence.

The Natural Lighting sub-committee "has confined its attention to the provision of adequate penetration of daylight into classrooms: omitting consideration of sunlight which is being studied by a Committee of the R.I.B.A."

Coming to the conclusion that standards of adequate daylight can no longer be based on absolute values of foot-candle illumination because of the daily variations of natural lighting, the report recommends the adoption of some ratio which correlates the illumination within a classroom and the unrestricted illumination from a complete sky hemisphere when the sky is completely overcast, thus disregarding the brighter weather values. The International Commission on Illumination has adopted the standard of 5,000 lux (approximately 500 foot candles) as representing the maximum illumination from an overcast sky of uniform brightness and the final recommendation is:—

1. No position in a classroom is fit for use as a school place from which no sky is visible at desk or table height.

2. The area of visible sky should be sufficient to afford an illumination on a horizontal plane at desk or table height equivalent to a daylight factor of 0.5 per cent. of the standard illumination.

This factor of 0.5 per cent. is in a minimum. In new schools a factor of 1 per cent. should be aimed at.

It is comforting to learn that whilst the daylight factor can be determined from drawings "by methods known to architects for some years," this somewhat laborious work can now be eliminated by the use of simple instruments which have recently been devised and which require no adjustment or special knowledge.

The remaining recommendations deal with location and design of windows and decoration and call for no special comment.

The report on Artificial Lighting is another piece of useful work which, however, perhaps breaks less new ground. Varying minimum standards of illumination for classrooms, corridors, assembly rooms, etc., are given in terms of foot candles and further recommendations are made as to the avoidance of glare, cast shadows and suitable positions for light sources.

Copies of the Reports can be obtained from the Society Offices, 32, Victoria Street, London, S.W.1.

S. P. T.

Correspondence

THE ENGLISH HOUSE
FROM SIR HERBERT BAKER, A.R.A. [F.]
14 Barton Street,
Westminster, London, S.W.1.
21 January 1932.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—I have read Mr. Nathaniel Lloyd's letter in the last JOURNAL with much interest, and I think

that perhaps he and your readers may like to know that his experience as to the period when the high halls of the yeomen's houses of the Tudor times were filled in with floors and chimneys, agrees also with my experience of many similar houses in Kent which I have examined or restored. The details of the chimney pieces roughly agree with the one definite date, 1595, which he gives. There is what I think may be a confirmation by

Shakespeare in the second part of King Henry VI. Jack Cade, to prove his royal descent from Edmund Mortimer and the Duke of Clarence's daughter, invents the story that his father was stolen as a child and became a bricklayer; and one of his fellow rebels confirms the story, saying, "He made a chimney in my father's house." I think that Shakespeare refers to a custom familiar in his own day when domestic habits were changing and big halls with unglazed windows and fireplaces on the open floor, such as Cade and his Kentish followers knew, were being cut up into small low rooms with big chimneys built up in the centre of the hall. These houses illustrate also the economy of oak in Elizabeth's time, due, no doubt, to the demand for ship building, the joists in the original houses being about 7 inches by 5 inches laid flatwise, whereas those inserted in Elizabethan times were more of the size of 5 inches by 4 inches, and were set upright.—I am, yours faithfully,

HERBERT BAKER [F.].

THE SHEFFIELD REGIONAL PLAN

20 Priory Place,
Doncaster.

To the Editor, JOURNAL R.I.B.A.

18 January 1932.

SIR,—After reading Professor A. Hamilton Thompson's review of the Sheffield and District Regional Planning Scheme appearing in your issue of the 9th, I feel reluctantly compelled to write this letter, as he appears to have laid somewhat undue stress on the deficiencies of historical geography in a Report on a region that has so predominantly contributed to the industrial prosperity of this country.

As Professor Thompson is fully aware, the West Riding of Yorkshire is inherent with a lax industrial growth; the earlier manufacturers having little regard to the scenic features of their environment. These natural considerations therefore loom largely, to the possible exclusion of others, in the preparation of an economic plan for the future of a region, that should result in a national as well as a local benefit in these difficult times.

It is curious that the reference to Wentworth Castle is once more erroneous. This house, which is situated some five or six miles from Wentworth Woodhouse, was rebuilt at the beginning of the eighteenth century, the façade and gallery being remodelled by Carr of York for the then Earl of Strafford between 1760 and 1770.

Possibly the proximity of this work was responsible for the architect's purchase of the nearby estate at Monk Bretton in 1769.

Mr. Kitson endeavoured to draw this distinction clearly in his paper to the Institute in 1910.—Yours faithfully,

H. A. JOHNSON [A.].

THE LECTURES TO BOYS AND GIRLS

Mr. E. R. Jarrett has sent to us the following delightful letter of appreciation which he received after the course of lectures which he gave to boys and girls at the R.I.B.A. earlier this month:

10 Nelson Square,

London, S.E.15.

3 January 1932.

DEAR SIR,—I am writing on behalf of the girls of St. Saviour's and St. Olave's Grammar School who attended your lectures, and to tell you how much we all enjoyed them. We particularly appreciated the way in which you made a technical subject interesting, even amusing, to the lay mind. The first two lectures will be most valuable as addition to our ordinary studies: the last made itself perhaps the best liked by sheer force of subject and treatment.

I may add that it was generally agreed among the girls that the lectures very conveniently fill the awkward pause between Christmas and the return to school.

Again thanking you,

Yours truly,

MARION LITTLE.

St. Saviour's and St. Olave's Grammar
School for Girls, New Kent Road, S.E.1.

STAINED GLASS AND ARCHITECTURE

Mr. Francis Hooper [F.] has forwarded to us the following extract from a letter he has received from Mr. Walter Millard [Ret. F.] which is printed with Mr. Millard's permission.

The letter in our JOURNAL of 9 January 1932 is much to my fancy. I know of more or less parallel instances to those you name, of the excluding of blessed light o'day from our churches, and of their guardians then expending funds in artificial illuminants. In one instance, that I know only too well, the gas leaks, into the bargain.

A year or two ago I had the pleasure of having my advice taken in the case of a little timber-built hill church near here, of ancient foundation, lying just below the 1,000 ft. level. Some time last century every window—except the stained east one—had been filled with rolled cathedral sheet, imitating lead lines. I got this all replaced by clear sheet in lead-lattice, and now you look out at the surrounding woods and fields and churchyard yews.

Reference to the choir of St. Paul's sets me asking whether Sir Wm. Richmond's great effort was quite worth while, after all. Stained glass windows fighting glass-mosaic tesserae!

UNWANTED CHURCHES

The following letter has been sent by the S.P.A.B. to a number of daily papers:—

The Society for the Protection of Ancient Buildings,
20 Buckingham Street, Adelphi, London, W.C.2.

To the Editor, "The Morning Post and Manchester Guardian."

SIR,—At York, at Exeter, at Lincoln, in London, and in many country places, a considerable number of old churches—some dating from the Norman Conquest and some built as late as in the eighteenth century—is held by proper Church Authority to be redundant, and by that Authority steps are being taken to gain power to demolish these buildings and to sell the sites.

These churches are valuable to the nation, and are intimately so to the cities, towns and villages where they stand. They are evidence of the life of our forebears; they are works of human skill. They are of greater importance than a vast number of movable works of art that are stored in museums for the relatively few who are specially interested, and in these days of rushing industrialism they bear witness to a quieter and no less good way of living than that which is ours. In the greater towns they are to the newer buildings what clean-hedged meadows are in a world of hurry, murk, and noise.

To members of this Society, and no doubt to very many besides—perhaps to every one who will not be eased by, or to almost all those who will not profit by, the changes—the threatened loss of these buildings is a sad augury for the coming years.

Members of this Society feel that these buildings should not be allowed to go; and they here appeal to those of your readers who view this process with sorrow to let the public know what can, or should be, done to save them.

The Society knows well the difficulties in which the Church is placed, how it can barely staff churches even where they are conveniently situated; how it is hard put to it to build new ones in newly populated areas, and still harder to maintain those forsaken by the people they served. It recognises the necessity for the union of many benefices; but it doubts both the wisdom of the Church and its moral right (for it is in a sense the guardian of these buildings for the nation) to order their demolition and the sale of their sites.—I am, Your obedient servant,

A. R. POWYS,
Secretary.

A Visit to the Building Research Station by Members of the R.I.B.A. Science Standing Committee on 26 November 1931

The first of the Science Standing Committee's visits to the Building Research Station in the new session took place on 26 November.

The work carried out on the subjects of (a) the effects of building materials on paint, (b) waterproofing and (c) bitumen was chosen for discussion during this visit.

An account was given of the various experiments which led to the conclusion set out in Building Research Bulletin No. 11—"The Effect of Building Materials on Paint Films." Particular reference was made to the chemical destruction of linseed oil paint by soluble substances which are often present in backgrounds of Portland cement and plaster. By means of specimens and photographs, it was demonstrated that linseed oil paint is liable to become soft and sticky when it is applied to a damp background containing both lime and salts of sodium or potassium. Under the same conditions, the paint may also become bleached or discoloured if the pigment is not of the lime-fast type.

A demonstration was given to show that quite small amounts of the alkali salts may be sufficient to produce such effects. The importance of this fact in connection with the problem of decorating plaster and cement was discussed fully and various methods used to combat the deleterious effects of alkaline surfaces were described.

Under the heading of waterproofers, a description was given of the investigation which is now in progress at the station, on the problem of the waterproofing of brickwork. The object of the investigation was to compare the efficacy and durability of a number of selected typical waterproofing treatments, colourless and otherwise.

The methods for testing these treatments include application of the waterproofers to a composite brick wall and the testing of this by spraying at intervals. Concurrently with this experiment the waterproofers were being examined in the laboratory with a view to measuring the reduction in permeability to air and water produced by their application to porous brick specimens. Such measurements were being carried out both before and after varying periods of natural exposure of the treated specimens on a roof. Other tests giving information about the different effects produced on brick were also described.

The various uses to which bituminous materials are put in building practice were described and some account given of asphalt roofing mastics, bitumen roofing felts, bitumen damp courses, and the bituminous emulsions employed for waterproofing purposes. The difficulties in ascertaining by laboratory examination the probable weathering qualities of asphalt mastics was explained; it was necessary to determine the physical properties of the constituent materials and compare them with those of the constituents in mastics which are known to have weathered well. In the case of roofing felts it had been possible to estimate their relative durability by exposing them to an artificial weathering cycle of rain, heat, frost and ultra-violet light. The results of these tests were found to agree extremely well with the results of long periods of actual exposure on roofs. An interesting development of the bitumen emulsion for waterproofing walls, etc., is the pigmented bitumen which is applied over a more impermeable bitumen under-

coat. Although investigations on bituminous damp courses had been but recently commenced some interesting results had already been obtained indicating the relative tendency, with different types, of the bitumen to flow under load.

Arising from the above visit the following correspondence may be of interest to members.

9 Conduit Street,
London, W.1.
December 1931.

DEAR DR. STRADLING,—Considerable interest has been expressed by the Science Standing Committee in the particular investigations which were described during the last visit of the Committee to the Station. Members were especially concerned by what appear to be the very far-reaching effects of the alkali content of cements. Since it is understood that the source of efflorescence troubles, the staining of stonework and many of the difficulties of painting over backings containing cement may be the presence of alkalies, the Committee would be gratified to know that investigations are in hand or under consideration with a view to eliminating, or at least reducing, if this is feasible, the objectionable constituents in cement; or failing this what may be done to lessen their effects. Members would also be glad to learn if there are any types of cement that could be specified with less likelihood of these important and very annoying defects arising in the absence of special precautions which are so difficult to ensure being carried out.—Yours truly,

(Signed) S. POINTON TAYLOR,
Hon. Secretary,
Science Standing Committee.

Department of Scientific and Industrial Research,
Building Research Station,
Garston, Watford, Herts.
19 December 1931.

DEAR SIR,—With reference to your letter of 11 December, the elimination of alkalies from ordinary Portland cements is probably impracticable in view of the widespread distribution of alkalies in the natural constituent materials, though some reduction in total alkali content of the final product may well be possible. The troubles arising from the presence of alkalies in Portland cement are attributable not to the total alkali content, but to that portion which is easily soluble in water, and the problem is therefore that of the reduction of the water soluble alkali content. The work of Anderegg and his collaborators in the United States of America has shown that there is a good correlation between the water soluble alkali content of a cement and the staining produced in Indiana limestone; this is confirmed by the results of some tests carried out at this Station on staining and efflorescence. A comparative study of a number of Portland cements made here, and the results of Anderegg's work, have shown that, besides the variation in total alkali content of different cements, there are also marked differences in the proportion of the total content which is water soluble. Thus white Portland cements usually produce much less staining of stonework than grey Portland cements, and this is attributable more to the lower proportion of the alkali content which is water soluble than to the smaller total alkali content, though this, of course, is also a factor.

At the present time no work is being carried out at this Station on the changes necessary in manufacture to reduce the content of water soluble alkalis in cement, either by reducing the total alkali content or that proportion of the total which is water soluble. Certain work along these lines has been projected, but it has not up to the present been possible to undertake it.

There do not appear at the present time to be any grey Portland

cements which can be relied on to contain a low content of water soluble alkalis. The use of pozzolanas is not in general likely to reduce staining or efflorescence from Portland cement appreciably, though it would probably be possible to produce a white pozzolana substantially free from soluble alkali for use with a high calcium lime. Aluminous cements usually have a low alkali content and should prove satisfactory, though occasional batches have been found with higher alkali contents than normal which have led to a failure of paint work in laboratory tests. It appears, however, that such cases are exceptional. White Portland cements should not usually produce appreciable staining of stonework, but there is still a possibility of failure of paint work on such backings. A high calcium lime used as a mortar material in brickwork or masonry

should not cause efflorescence or staining; it may be fairly safely gauged with a white Portland cement to give sufficient strength. As a facing coat on which to apply paintwork a high calcium lime may often lead to failure, since, though innocuous itself, the mortar is very permeable and permits the passage of any salts present in the backing. Some greystone lime hydrates should prove suitable for masonry work, but those possessing the higher hydraulicity are the more likely to contain soluble alkalis and to be unsatisfactory. Eminently hydraulic limes are likely to cause trouble, though not so intensively as a grey Portland cement.—Yours faithfully,

(Signed) R. E. STRADLING,

Director of Building Research.

Obituary

FREDERICK ARTHUR WALTERS, F.S.A. [F.],
ARCHITECT OF BUCKFAST ABBEY

BY THE ABBOT OF BUCKFAST

In October 1882 a colony of French Benedictines took up their abode in Devonshire, in the village of Buckfast on the banks of the River Dart. Their habitation at first was a very modern looking house which gave itself the name of Buckfast Abbey. In reality the house was part of the ruins of an ancient Abbey which were made to look like a dwelling house. The newcomers understood that they had settled on the site of one of England's old religious houses; but beyond this general impression there was no means in the first days to know exactly, when looking at the grazing paddock of luscious grass, where the original Abbey had stood. A kind Providence led to the spot a young architect in the summer of 1883, Mr. Frederick Walters. He was brought to Buckfast by the late Professor Mivart, who saw in the arrival of the French Benedictines the possibility of realising a cherished dream, that of resuscitating bodily one of England's dead Abbeys. After a short period of reserve and timidity on both sides—for the monks were very French and Mr. Walters was very English—the bold thing was done: Mr. Walters was appointed architect to the Community of the French Fathers, and was asked to prepare plans for the rebuilding of Buckfast Abbey.

Mr. Walters must have been aware of the quixotic side of the transaction, for a more destitute and, in a way, a more helpless body of monks could hardly be imagined than those exiled French religious, coming from a monastery in Burgundy. But from the very start Mr. Walters took his mission very seriously. He, too, was fired by the thought of calling out from its grave of four centuries an English Abbey. Quite appropriately, his first task was more like the labour of a gravedigger. With pickaxe and shovel, crowbar and wheelbarrow, the Brethren worked under the supervision of the architect, and before long the buried mystery of the past was revealed to the eyes of the expert archaeologist. Mr. Walters knew the meaning of every angle in the broad foundations, and Buckfast was evidently a classical instance of the mediæval Abbey. For the complete visualising of the past Mr. Walters betook himself to the famous ruins of monastic grandeur. Quite to the end of his life he spoke with raptures of one autumnal Sunday afternoon which he was allowed to spend at Fountains Abbey, always with a view to resuscitate Buckfast. The Abbey, comprising church and conventual buildings, is being completed this year. It is expected to have the church consecrated on 25 August.

During the half century from 1883 until now, Mr. Walters has been the only architectural adviser of the Community. It was his great wish to be present at the final act, the Consecration. This was not granted to him, but he died in the hope of the great vision. Mr. Walters was one of those many masters of

the architectonic art to whom a building is the external expression of an internal faith. The resurrection of Buckfast Abbey from a dead past was to him a symbol of a higher reality, the intrinsic immortality of all beautiful and holy things, above all of a beautiful and hallowed mind.

The following additional notes on Mr. Walters have been contributed by Mr. G. Flint Clarkson [A.]:—

By the death of Frederick Walters in his eighty-third year the profession loses a personality hard to replace and the nation the author of many buildings that will live.

His work was his life and the outcome of his faith, a faith entered into late in youth and which was all in all to him. While training in the Painters' School at the Academy he felt architecture's call, and later entered Mr. Goldie's office.

Although a learned antiquary he was by no means a copyist; everything he did was touched with life and never showed the least trace of resurrected bones.

He erected over forty churches, the majority based on mediæval work, but in some instances, as St. Anselm's, Kingsway, the Chapel at Sanderstead Convent and the Womersley Seminary, founded on the early essays in Italian motives.

It was an intense pleasure to him, and he was in good form almost to the last, that he saw the completion or practical completion of five large works with which he had been long connected: the Church of the Sacred Heart, Wimbledon, Buckfast Abbey, Devon, St. Peter's, Winchester, and Our Lady of Ransom, Eastbourne, and at the time of his death he had just finished the drawings for the completion of St. Benedict's, Ealing.

He was a great worker; many of the working drawings and marvellous perspectives were by his own hand. St. Anne's, Vauxhall, the Church of the Guardian Angels, Mile End, the Sacred Heart at Battersea, St. Mary's, Croydon, are a few of his churches in London.

He erected the Sacristies at Downside Abbey, his work there also including the Monument to his friend Thomas Gurney; another notable monument is that at St. Neots, Huntingdon.

Colour decoration by him is greatly admired; examples can be seen at St. George's Cathedral, Southwark, and Plymouth Cathedral, and altars to his design are to be found in all parts of the country.

His work was by no means confined to churches. The Bishop's House at Southwark, St. Mary's College, Woolhampton, are examples of his domestic work, and many convents and schools owe their conception to him; among country houses, Imbercombe Manor should be mentioned.

He was a great authority on Heraldic Art and a noted numismatist.

Those who came in contact with him learned much, but what is most precious, that he was their friend.

GEORGE WASHINGTON HENRY JACK

A MEMOIR BY T. HAMILTON CRAWFORD, R.S.W.

George Jack died at Finchley on 16 December after a long illness. He was born in New York 76 years ago, and on the death of his father, an engraver, his mother brought him and his younger brother to Glasgow, where he was educated and articled to Horatio K. Bromhead, architect in that city. At the end of his indentures he came to London, and after one or two short engagements became settled in the office of the late Philip Webb, where he remained till Webb's retirement. William Morris and Webb were, of course, inseparable, and soon George Jack began to do work for Morris and Co., chiefly designs for furniture. Round about 1880 he first began to carve in wood and model in clay, getting his first hints in the technique of the former craft from Laurence Turner. From that time onward there was a steady demand for both his carving and his modelling, and his works are many and various and widely distributed. Later his activities were extended to designing mosaics and stained glass, and in both of these branches he did a considerable amount of work. While the late Professor Lethaby was director of the Royal College of Arts at South Kensington, George Jack was teacher of carving, and about this time he produced his book, *Woodcarving, Design and Workmanship*, for the Artistic Arts and Crafts Series. It is by no means a dry text-book, but rather a successful endeavour to show how the craft is bound up with the poetry of life. Lethaby spoke of him as the most original carver in England. On the retirement of Philip Webb such of his clients as had building intentions came to George Jack as his natural successor, and he did several country houses as well as additions to Webb's work. He was a member of the Art Workers' Guild for 25 years and one of the original members of the Arts and Crafts Society, and a regular exhibitor for many years. He made delightful toys and produced a book on toy-making.

It should be recorded that George Jack's earliest ambition was to be a painter, but among the three of us with a similar ambition in the Glasgow architect's office he was the only one to abandon the idea, although he alone had the distinctive painter's faculty. A good deal of the painter's sense can be seen in his architectural drawings, even in those that are only instructions to the builder, and in the last year of his life, when his strength was not equal to carving or modelling, he took out his colours and canvases and finished at least three romantic subjects that wanted nothing but some of the technical readiness which comes only from incessant practice.

It will be plain to anyone reading his book on carving that his skill in literature was little behind his other gifts, and on occasion he could even "build the lofty line" or turn a couplet.

His faith in the Divine idea behind the visible universe was firm and unshaken by any scientific doubts, and a warm appreciation of Hegel's philosophy was among the last words the present writer heard from him.

Lastly, no man ever inspired deeper affection in those who had his friendship and the loss to many is irreparable.

The following are a few of his architectural works:—

House and Memorial, Arisaig, Scotland.

Music Room and Entrance Lodge, Rounton Grange, Northallerton.

Alteration, Dunsany Castle, Ireland.

House at Compton, Winchester.

Alteration, Forest Garth, Bramsgrove.

Addition, Great Tangle, near Guildford.

Addition, Rycote House, near Oxford.

Iron Screen, South West Chapel, Peterborough Cathedral.

House, Four Winds, Ewhurst.

Shortenills Gorse, Chalfont St. Giles.

CHARLES PRESTWICK SCOTT, 1846-1932

EDITOR OF "THE MANCHESTER GUARDIAN"

The death of L. P. Scott, for 57 years editor of *The Manchester Guardian*, should not pass unnoticed in this Journal. A tribute is due here not only to one who was, possibly, the greatest editor of his time, but also to one whose columns were always open for the promotion of Architecture as a practised art and for its record as an historical study.

He succeeded to the editorship in 1872, two years after he had taken a first class at Oxford in *Literæ Humaniores*, and with the inborn instinct of a great organiser was an unflinching judge of the ability that could best be enlisted to serve his purpose. No subject was handled in his columns excepting it was from the hand of an able writer and an authority on his subject.

Throughout his editorship and especially in later years *The Manchester Guardian* has constantly dealt with architectural questions in such a way as to arouse the interest and imagination of the public and as to be attractive and informing to architects, and this not only in the locality principally served by the paper but also in a wider sphere. The space given to letterpress and illustration was generous and the reporting of papers or speeches always accurate and to the point. Scott—one may put party politics aside—was insistent and unflinching in support of all causes which he considered of vital importance, some of them unpopular at the time but few subsequently unsolved in the way he predicted, while his unflinching sympathy and help were always extended to architectural and artistic effort, and such societies as the C.P.R.E., nationally, and the Manchester Civic Advisory Committee, locally, could always count on a strong backing.

He died in his 86th year, having kept in touch with his paper almost to the last and taken his daily bicycle ride hatless, with his fine head slightly inclined to one side and his white beard fluttering in the wind.

Last summer he attended a gaudy at Corpus—his old Oxford College—physically not so alert as formerly, but as arresting in appearance, as keen in intellect and as kindly as ever.

GEORGE WATT, J.P. [F.]

George Watt, who died very suddenly on 18 December 1931, in the sixty-eighth year of his age, was the younger son of the late Mr. William Watt, senior partner in the firm of Messrs. G. Fordyce and Co., builders, Aberdeen. He served an apprenticeship with Messrs. Matthews and Mackenzie, architects, Aberdeen, and afterwards was for several years a draughtsman with Messrs. Campbell Douglas and Sellars, architects, Glasgow. Mr. Watt returned to Aberdeen in 1885, and in 1891 entered into a partnership with Mr. Alexander Brown, which continued until Mr. Brown's death in 1925, and about three years later he retired from active practice.

Early in Mr. Watt's career he had the pleasure of carrying out for Sir Thomas Burnett, Bart., of Leys, some interesting works at Crathes Castle, one of the best examples of "Scottish Baronial" near Aberdeen; and about the same time he won the competition for the Aberdeen Public Library, which was duly built, and at a later date was extended by him. Trinity Hall, the house of the Incorporated Trades of Aberdeen, was largely remodelled internally, and greatly enlarged by Mr. Watt's firm. The most extensive and important public work for which the firm was responsible was Oldmill Hospital, near Aberdeen, now administered by the Public Assistance Department of the Town Council.

Mr. Watt was much employed in buildings for the Church of Scotland: he designed four large and stately churches in Aberdeen alone—Ruthricton West, Melville, Holburn West, and Beechgrove. One of his smaller churches, at Torphins, on Deeside, may be particularly mentioned.

In domestic work of the best type, Mr. Watt's most important work was, perhaps, "Morkeu," Culter; but in this genre the outstanding

example is what he made of his own residence, Bielside House, Cults. He transformed and transfigured an old and somewhat dull mansion-house, and continued year by year to make of it and its gardens a place of surprising and wonderful beauty. His taste and his tastes—such as

antiquarian leanings—his fancy, and his love for everything fine and beautiful, stand there revealed quite naturally—especially to those of his professional brethren who have been privileged to enjoy the hospitality and the friendship of the architect-owner, now gone before.

Architects' Unemployment Relief Fund

The Architects' Unemployment Committee are now employing twenty men through the London Society and the London Survey Committee, and it is hoped to place more week by week as openings for work present themselves and the funds at the Committee's disposal increase. So far the scheme is in operation in London only, but money is being held in reserve for similar schemes in the Provinces. There are numbers of men for whom work has still to be found and the Committee cannot hope to provide employment for all of them. They therefore recommend that architects and architects' assistants should accept any suitable work that is available during this period of emergency. At the same time they would like to draw the attention of those members of the architectural profession who are fortunate enough to have work and have not yet contributed to the fund, to the Prince of Wales's speech at the Albert Hall on 27 January in which he appealed to "all those who are in work to play the part of neighbour and friend to the men out of work," and to impress on them the extreme seriousness of the position in which so many of their profession now find themselves, suddenly deprived of work and without reserves to carry them over a prolonged period of unemployment. The work of the Unemployment Committee must commend itself generally from two points of view, in that it is helping to provide such men with a means of livelihood and is carrying out work that will be of the greatest importance in the development of London. The Committee earnestly appeal for further donations and subscriptions and request that all cheques be made payable to the Architects' Unemployment Committee and sent to the Secretary, Architects' Unemployment Committee, 9, Conduit Street, W.1.

We publish below a list of those who have joined the scheme since our last issue:—

The following have joined the scheme as monthly subscribers:—

Mr. E. Guy Dawber and Staff.

Messrs. F. W. Troup; Mr. H. R. Steele; Mr. R. J. Troup; Mr. G. H. R. Heritage; Mr. R. E. Hiscock; Mr. A. Curtis.

Messrs. Albert D. Millar; Mr. W. Boyd Scott; Mr. A. F. Simpson; Mr. W. E. Duke; Mr. N. W. Ward; Mr. L. J. Serra; Mr. K. E. Webb; Mr. A. S. Gray; Mr. F. A. Weltert; Selfridge and Co.

Sir Herbert Baker; Mr. H. J. Manchip; Mr. R. H. Maddock; Mr. A. C. S. Auld; Mr. A. Slade; Mr. F. Sharp; Mr. L. J. Bathurst; Mr. T. Harley; Mr. V. Helbing; Mr. C. D. St. Leger; Mr. W. Percik; Mr. H. E. Wilson; Mr. D. E. Fleming; Mr. R. E. Thallon; Mr. H. S. Stephens; Miss M. G. Pearson.

The Architectural Staff of the London County Council.

Messrs. Rees and Holt; Mr. K. Cameron; Mr. W. J. Woods; Mr. A. S. MacMaster.

Messrs. Adams, Holden and Pearson; Mr. L. M. Angus; Mr. W. Holden; Mr. T. Haiselsen; Mr. F. H. Smith; Mr. K. Bilsborrow; Mr. D. M. Pate; Mr. C. W. Hutton; Mr. E. B. Thompson; Mr. I. Schultz.

Messrs. William A. Pite, Son and Fairweather; Mr. H. H. Laws; Mr. D. R. Harper; Mr. J. Nicols.

Police Architect and Surveyor, New Scotland Yard: Mr. G. Mackenzie Trench; Mr. J. P. Price; Major A. S. Hinkley; Mr. R. N. Cowley.

Architects' Department, United Dairies, Ltd.: Mr. F. T. Dear; Mr. C. G. Bennett; Mr. V. L. Johnson; Mr. A. Hunt; Mr. C. J. Hardy; Mr. A. P. Woodington; Mr. S. Chatfield; Mr. L. Carpenter; Mr. R. Akerman; Mr. A. Kettle; Mr. H. Leigh.

Sir John Burnet, Tait and Lorne and Staff.

Department of Architecture, Surveying and Building, Northern Polytechnic.

Mr. R. W. Sampson; Mr. W. Dingwall.

Mr. E. W. Banfield; Mr. R. W. Cable; Mr. F. Milton Cashmole; Mr. E. Priestley Cooper; Mr. Edward E. Hall.

The following names of members of staff have been received since last week:—

Messrs. Raymond and Edward Unwin: Mr. R. Alwyn Dent; Mr. P. B. Mauger; Mr. S. Tennant.

Messrs. North, Robin and Wilsdon: Mr. F. Woolard; Mr. H. Linden; Mr. F. Dark; Mr. J. Cooper; Mr. B. Locke; Mr. R. Burden; Mr. S. Parker; Mr. G. Amos.

Messrs. Geo. Elkington and Son: Mr. George Elkington; Mr. G. Leonard Elkington; Mr. Hylton B. Elkington; Mr. F. W. Andrews; Mr. E. W. Palmer.

Messrs. Saxon Snell and Phillips: Mr. A. G. Yates; Mr. R. Ward; Mr. F. W. Godfrey.

The Middlesex County Council: Mr. C. J. Crossman.

Messrs. Newman and Jacques: C. H. Hunt.

Messrs. Robert Atkinson: Mr. R. Pitt.

Architects' Branch, Board of Education: Mr. G. E. Kendall; Mr. F. Jackman; Mr. W. R. Macdonald; Mr. R. W. Atkey; Mr. F. B. R. Brown; Mr. T. Burrington.

The Committee have also gratefully to acknowledge the following donations:—

The York and East Yorkshire Society, £47 6s. 6d.; Mr. Victor Wilkins, £26 5s.; Sir Edwin Cooper, £25; Mr. J. J. Joass, £25; Mr. Septimus Warwick, £25; £10 10s. from Sir Frank Baines; Messrs. Elcock and Sutcliffe; Messrs. Wm. and T. R. Milburn; Messrs. Percy Tubbs, Son and Duncan; Messrs. R. J. Williams and Partners; £10 from an anonymous donor; £5 5s. from Miss E. Charles; Mr. P. H. Adams and Mr. Wilfrid Bond; £5 from Mr. A. Hunter Crawford and Mr. Maurice Lyon; £4 4s. from Mr. T. Schaerer and Mr. W. R. Davidge; £3 3s. from Messrs. W. V. Betts and Son; Mr. J. G. Cole; Mr. Cyril Farey and Mr. G. P. Powis; £3 from Messrs. Knapp-Fisher, Powell and Russell; £2 2s. from Major J. O. Cook; £1 1s. from Miss M. Davies and Mr. R. Dobson; Mr. Harry Hubbard and Mr. F. W. Marshall; £1 from Miss H. McLachlan and Mr. P. C. Harris; 10s. from Mr. F. H. Heaven and Mr. E. G. Samways; 6s. from Mr. H. C. Hunter.

Notes

THE CODE OF PROFESSIONAL PRACTICE

On the recommendation of the Practice Standing Committee the Council have revised Clauses 1, 2, and 3 of the Code of Professional Practice, as follows:—

1. An Architect is remunerated solely by his professional fees, and is debarred from any other source of remuneration in connection with the works and duties entrusted to him. It is the duty of an Architect to uphold in every way possible the Scale of Professional Charges adopted by the Royal Institute.

2. An Architect must not accept any work which involves the giving or receiving of discounts or commissions, nor must he accept any discount, gift or commission from contractors or tradesmen, whether employed upon his works or not. An Architect employed by a commercial firm must be remunerated only by means of a salary, and this remuneration must not depend upon commissions based on the profits of the firm.

If an Architect own, or have a commercial interest either as a director of a company or as a consultant or adviser or as a shareholder, in any material, device or invention used in a building, he must inform his client thereof, and must obtain his sanction before specifying the use of it in works under his direction.

3. (a) An Architect must not advertise nor offer his services by means of circulars or otherwise, nor may he make* paid announcements in the Press. He may, however, notify his correspondents by post once of any change of address.

(b) Though there is no objection to any Architect allowing signed illustrations and descriptions of his work to be published in the Press, with reference to such illustrations or descriptions, it is contrary to professional ethics:—

(1) To give monetary consideration for such insertions.

(2) To allow such insertions to be used by the publishers for extorting advertisements from unwilling contractors.

(c) An Architect may sign his buildings and exhibit his name outside his office and on buildings in course of erection, including those where he is acting as Architect for alterations and additions, provided it is done in an unostentatious manner, and the lettering of his name does not exceed 2 inches in height. With the client's approval any such board may remain for a period not exceeding two months after the completion of the building provided that they do not display: "To Let" or "For Sale" or similar notices; but they may indicate that the plans can be seen at the Architect's office.

(d) Architects who are Surveyors to recognised estates may announce land or sites or premises for sale or letting in connection with their appointments or when they are acting as Architects for the development of land or sites.

*NOTE.—This does not refer to advertisements or letters respecting appointments open or wanted, nor to the insertion of one notice of change of address in the professional press.

Clause 12 has been deleted as the substance of it has been embodied in Clause 2.

LIGHT IN ARCHITECTURE

In order that architects may acquaint themselves with the most recent developments in the use of light in architecture, a two-day conference, on 2 and 3 March 1932, has been arranged by the Lighting Service Bureau, 15 Savoy Street,

W.C.2. Short lectures will be given by authorities on the subject, and a large proportion of the time will be devoted to discussion.

The following programme has been arranged:—

WEDNESDAY, 2 MARCH

Morning

10.0 Introductory Remarks by H. A. Lingard, Esq., the Chairman of the E.L.M.A. Council.

10.15 *Lighting Fundamentals*. J. W. T. Walsh, Esq., D.Sc., of the National Physical Laboratory.

11.15 *Characteristics of Electric Lamps*. L. E. Buckell, Esq., Chairman, I.S.B. Committee.
General Discussion.

Afternoon

2.15 *Aims and Objects of Architectural Lighting*. Waldo Maitland, Esq., A.R.I.B.A.
Discussion opened by John Gloag, Esq.

3.30 *Electrical Services for Lighting*. R. Grierson, Esq., A.M.I.E.E., A.M.I.Mech.E.

4.45 Inspection of Broadcasting House, by kind permission of the British Broadcasting Corporation.

THURSDAY, 3 MARCH

Morning

10.0 Introductory Remarks by the Vice-Chairman, Electricity Commission, Sir John R. Brooke, C.B.

10.15 *Floodlighting*. H. Lingard, Esq.
Discussion opened by Rome Guthrie, Esq., F.R.I.B.A.

11.30 *Special Lighting Problems*. W. J. Jones, Esq., M.Sc., A.M.I.E.E.
Discussion opened by Maxwell Ayrton, F.R.I.B.A.

Afternoon

2.15 *Lighting Requirements for Commercial Buildings*.
Discussion opened by P. F. Westwood, Esq., F.R.I.B.A.

3.30 *Modern Tendencies in the Lighting of Theatres, Hotels, Restaurants and Exhibitions*. Howard Robertson, Esq., F.R.I.B.A., S.A.D.G.
Discussion opened by R. A. Duncan, Esq., A.R.I.B.A.

4.45 Visit (to be announced later).

Application for tickets, which are free, should be made to the Lighting Service Bureau, 15 Savoy Street, London, W.C.2.

THE TITE PRIZE AND THE VICTORY SCHOLARSHIP, 1932

PRELIMINARY COMPETITIONS

The attention of intending competitors is called to the fact that the preliminary competitions for the Tite Prize and the Victory Scholarship will be held in London and at centres in the provinces on Thursday, 3 March, and Friday, 4 March 1932, respectively.

Forms of application for admission to the Preliminary Competitions may be obtained at the R.I.B.A., 9 Conduit Street, W.1. The closing date for the submission of forms of application is Friday, 12 February 1932.

R.I.B.A. FINAL EXAMINATION: INDIA

The R.I.B.A. Examination Board in India have arranged to hold the R.I.B.A. Final Examination in Bombay from 1 to 9 April 1932. The last day for receiving applications, which should be sent to the Hon. Secretary of the R.I.B.A. Examination Board in India, 43 Apollo Street, Fort, Bombay, is 3 March 1932.

CORRECTION

In the JOURNAL of 9 January in the account of the dinner given by Ayrshire Architects to Colonel Moore, M.P., Mr. George A. Boswell's middle initial was incorrectly given as H. and Mr. Alexander Mair's name was incorrectly given as Muir.

NOTES FROM THE MINUTES OF THE COUNCIL,
4 January 1932

R.I.B.A. PRIZES AND STUDENTSHIPS

The Council approved the Annual Award of the R.I.B.A. Prizes and Studentships submitted by the Board of Architectural Education and appointed the Juries for the Prizes and Studentships for 1932-1933.

THE R.I.B.A. ATHENS BURSARY

1. *The 1932 Bursary.*—The Board reported that the President, in consultation with the Officers of the Board of Architectural Education and Mr. Henry M. Fletcher [F.], R.I.B.A. representative on the Council of the British School at Athens, had awarded the Bursary to Mr. E. R. F. Cole [F.], B.Arch. Liverpool, Liverpool School of Architecture, University of Liverpool.

2. *The 1931 Bursary.*—The Board reported that the President, in consultation with the Officers of the Board of Architectural Education and Mr. Henry M. Fletcher [F.], R.I.B.A. representative on the Council of the British School at Athens, had approved the report on his tour submitted by Mr. Joseph Addison [A.], M.C., R.I.B.A. Athens Bursar 1931.

THE UNIVERSITY OF LONDON ARCHITECTURAL EDUCATION COMMITTEE

Mr. W. H. Ansell [F.], Chairman of the Board of Architectural Education, and Mr. A. H. Moberly, M.A. [F.], Vice-Chairman of the Board of Architectural Education, were nominated to represent the R.I.B.A. on the University of London Architectural Education Committee for the year beginning 1 March 1932.

GIFT OF COCKERELL DRAWINGS TO THE R.I.B.A. LIBRARY

The cordial thanks of the Council were conveyed to Mrs. Noel for her generosity in presenting to the R.I.B.A. Library a selection of drawings by C. R. Cockerell and F. P. Cockerell.

The Council also expressed their appreciation of Mrs. Noel's kindness in lending the Institute the beautiful drawing of Sir Christopher Wren's buildings by C. R. Cockerell.

COUNCIL VISIT TO THE SOANE MUSEUM

The cordial thanks of the Council were conveyed to Mr. A. T. Bolton for the hospitality extended to the members of Council who visited the Soane Museum on 30 November.

CHRISTMAS HOLIDAY LECTURES FOR BOYS AND GIRLS

The Council passed a very hearty vote of thanks to Mr. E. R. Jarrett [A.], for the very successful lectures which he gave during the recent Christmas holidays.

MR. W. E. VERNON CROMPTON [F.]

The Council passed a cordial vote of thanks to Mr. W. E. Vernon Crompton [F.], for the exceptionally long and valuable service which he has given to the Institute on many Committees and as an Examiner. The Council are glad to know that although Mr. Crompton is no longer resident in London he will continue to serve as an Examiner and on some of the more important Committees.

OVERHEAD ELECTRIFICATION

On the recommendation of the Art Standing Committee letters have been sent to the Ministry of Health, the Ministry of Transport and the Electricity Commissioners urging them to issue instructions to local authorities that overhead electric cables should be conducted

in such a way as not to detract from the architectural amenities of towns and villages.

The Council have also suggested that Regional Committees and Technical Advisers should always be consulted before schemes are approved.

DEPARTMENTAL COMMITTEE ON LOCAL GOVERNMENT OFFICERS

The Council approved a memorandum of evidence to be submitted to the Departmental Committee on Local Government Officers.

ARCHITECTS' UNEMPLOYMENT RELIEF FUND

A grant of £500 was made to the Architects' Unemployment Relief Fund.

THE IMPERIAL INSTITUTE ADVISORY COMMITTEE ON TIMBERS

Mr. A. H. Barnes [F.] was appointed to serve on the Imperial Institute Advisory Committee on Timbers in place of Mr. W. E. Vernon Crompton [F.], who has found it necessary to resign his appointment as one of the R.I.B.A. representatives.

FROST BURSTING OF WATER PIPES

Mr. Alan E. Munby was appointed to serve on a special Committee appointed by the British Non-Ferrous Metals Research Association to supervise a thorough investigation on the frost bursting of water pipes, and a grant of £5 5s. was made towards the cost of the investigation.

THE ARCHITECTS' (REGISTRATION) ACT

The President reported that he had nominated Major Harry Barnes to serve on the Computation Committee appointed by the Home Secretary.

SLUM CLEARANCE AND RE-PLANNING

The following members were appointed to serve on a special Committee to consider and report on the question of slum clearance and re-planning:—

Major Harry Barnes.
Mr. W. R. Davidge.
Mr. F. M. Elgood.
Mr. W. Harding Thompson.
Mr. T. Alwyn Lloyd.
Mr. E. G. Culpin.
Mr. Edward Unwin.
Mr. V. L. Nash.

REVISION OF THE CODE OF PROFESSIONAL PRACTICE

On the recommendation of the Practice Standing Committee Clauses 1, 2 and 3 of the Code of Professional Practice were revised (see page 280 of this JOURNAL).

THE FELLOWSHIP

The Council, by a unanimous vote, elected the following architect to the Fellowship under the powers defined in the Supplemental Charter of 1925:

Mr. F. G. Gilling.

MEMBERSHIP

The following members were elected:—

As Hon. Associate	..	..	..	1
As Hon. Corresponding Members	..	..	..	3
As Fellows	..	..	..	15
As Associates	..	..	..	22
As Licentiates	..	..	..	19

Election, 1 February 1932.—Applications for membership were approved as follows:—

As Fellows	..	..	..	16 applications.
As Associates	..	..	..	10 "
As Licentiates	..	..	..	45 "

Reinstatement.—The following ex-member was reinstated:—

As Fellow: Charles Frederick Ward.

Transfer to the Retired Members Class.—The following members were transferred to the Retired Members Class:—

As Retired Fellows.

Herbert William Bird [F. 1911].

Henry Leon Cabuche [F. 1925].

Henry Edward Clifford [*F.* 1906].
 Charles John Marshall [*F.* 1923].
 Orlando Middleton [*F.* 1922].
 Paul Ogden [*F.* 1892].
 Frederick Atkinson Powell [*F.* 1890].
 John Thomson [*F.* 1906].
 William Fleming Wilkie [*F.* 1906].

As Retired Associates.

George Brumell [*A.* 1901].
 George William Hatcher [*A.* 1897].
 Theodore Moore [*A.* 1887].
 Ernest George Rodway [*A.* 1902].
 Edgar Hugh Woodcock [*A.* 1909].

As Retired Licentiates.

John George Burrell [*L.* 1911].

Alderman Tom Cook [*L.* 1925].
 William Basil Yeatman Draper [*L.* 1911].
 Henry Sulley [*L.* 1911].
 Arthur William Worrall [*L.* 1911].

Resignations.—The following resignations were accepted with regret:—

Alexander Thomson Heathcote [*F.*]
 Ernest Richard Eckett Sutton [*F.*]
 Francis Albert Whitwell [*F.*]
 Thomas Ford Amery [*A.*]
 Arthur Robert Dalzel Pictor [*A.*]
 Alexander Lorimer [*L.*]
 Walter Potts [*L.*]
 Arthur Priest [*L.*]
 Edward FitzEdward Seaman [*L.*]
 Edwin Ashley Toombs [*L.*]

Allied Societies

BIRMINGHAM ARCHITECTURAL ASSOCIATION

The Sixth General Meeting of the Session was held at the Association's Rooms, Royal Society of Artists' Buildings, on Friday, 8 January. The President, Mr. John B. Surman [*F.*], was in the Chair and Lieut.-Colonel Cart de Lafontaine, O.B.E., T.D. [*A.*], gave a lecture, illustrated by lantern slides, on the British military cemeteries in France, Belgium and Italy.

Col. Cart de Lafontaine traced the subject of soldiers' graves from the beginning of the war when an amalgamation of the St. John of Jerusalem and the Red Cross Societies took care of them, until, at the end of the war, the military authorities appointed the War Graves Commission to deal with the important work of graves and records. The Commission undertook the formation of soldiers' and sailors' cemeteries and memorials which should, as far as possible, be made to last for all time, and adequate funds were provided for their maintenance.

As far as possible, existing graves were incorporated in the larger cemeteries, but in many cases this proved difficult as many of the early graves were badly out of alignment, having probably been made at night and under fire.

Although no two cemeteries were exactly alike, in general plan they were similar, each having the dominating "Cross of Sacrifice" and the "Stone of Remembrance," as well as a simple building to serve as a Record House. At first the cemeteries were bounded by a high wall, but later it was decided to make the wall only just high enough to keep cattle out and make a marked boundary, giving also an uninterrupted view of the cemetery. Most of the headstones and crosses in the British cemeteries were carved in Great Britain, but the actual stone used was chiefly drawn from local quarries.

For many reasons, said the lecturer, it was considered desirable to plan the arrangement of the graves as methodically as possible, the rows of white headstones giving a grand impression of soldiers drawn up in lines. The headstones were all of a uniform size—2 feet 8 inches above ground, 1 foot 3 inches wide and 3 inches thick, with a slight segmental top—and in order that they should maintain an upright position a means was devised for a concrete beam, about 20 feet long, with short arms, to be placed along the heads of the graves, below ground. These beams contained slots into which the headstones were fitted.

Each grave had a narrow strip of soil close to the headstone in which to plant flowers and to keep the grass, which covers the rest of the grave, away from the stones for the purpose of easy mowing. Irrespective of rank, the graves were all made at a cost of £10 each. Where particulars could be obtained, these, with the man's regimental badge, were carved on the stones, and if they wished, relations could put a short private inscription below, but this sometimes led to difficulties, and those responsible were often called upon to exercise much tact and diplomacy.

Colonel Martineau and Major Wicks, M.C. [*A.*], who proposed and seconded the vote of thanks to Lieut.-Colonel de Lafontaine, both commented upon the imperial aspect of these cemeteries and how the national memorials stood in silent witness to the futility and sacrifice of war.

THE MANCHESTER SOCIETY

The third sessional meeting of the Manchester Society of Architects was held at the Society's rooms on Wednesday, 13 January 1932, when a Paper was read by Mr. Joseph Emberton [*A.*] on "Rational Architecture."

Mr. Emberton contended that the bye-laws, materials and ideas which still govern building design are largely out of date. Present economic conditions, he said, necessitate our making greater use of new materials and to effect a great saving in the cost of buildings and to free them from much superfluous material. The use of brickwork as a walling material in a steel-framed building is entirely out of date, and he instanced that glass, which is one of the most perfect of weather-resisting materials, backed by cork, which is an efficient insulating material, could be substituted for 14 inch brick walls; thus 2½ inches would provide a greater degree of insulation than four 14 inch walls. Mr. Emberton strongly advocated high buildings, the restriction of which he described as a survival of a period when no efficient vertical transport was available, resulting in the development of uneconomic and unhealthy buildings. He contended that the greater area of ground remaining unbuilt upon, consequent upon the greater height of the buildings, would go far to solve the traffic problem, as well as to provide more airy streets, and that the resulting effect of large isolated towers, with adequate space around them, would be more satisfactory architecturally than the present system of continuous street frontages. This system, if applied to domestic buildings, would supplant the cottage, an out-of-date and uneconomic unit for human habitation. High blocks of flats would provide much more airy habitations, with unrestricted views over the countryside, which could be utilised for agriculture, playing fields and public gardens.

Mr. Emberton advocated an approach to the problems of design from a functional point of view, and demonstrated the waste of light and air and the general extravagance of much of the building of the last twenty years. He claimed that the Gothic builders of the earlier period designed their cathedrals from the functional aspect, and that only when they had gone as far as they could in this direction did they occupy themselves with such ornament as is seen in Henry VII's Chapel at Westminster.

Mr. Emberton illustrated his Paper with many slides. Mr. J. L. Gleave proposed, and Mr. P. G. Fairhurst seconded, a vote of thanks, which was supported by many other speakers who expressed their appreciation and enjoyment of the Paper, while not invariably agreeing with all of its sentiments. The vote was enthusiastically carried by a large audience.

WEST YORKSHIRE SOCIETY OF ARCHITECTS

Mr. Norman Culley [*F.*], president, took the chair at a meeting of the above held at Leeds on 21 January, when a lecture on "Architectural Competitions" was given by Mr. Percy E. Thomas, of Cardiff, before a large attendance.

The lecturer said that he did not come to pose before them as a competition expert. He had, however, a fairly wide experience as a competitor, and it might interest some of their younger members to

learn some of his conclusions and to be given some useful "tips." The real difficulty in competitions was the lack of personal touch between promoter and architect, in the initial stages. Conditions were now as well-nigh perfect as possible, and competitors could enter a contest knowing that they would be given a square deal. He disagreed with the system of publishing the name of the assessor, as that too often affected the character of the design; it should be sufficient to state that an approved assessor had been appointed by the R.I.B.A. Mr. Thomas then talked on the best methods of working out a problem and the methods of inspiring the various stages of design on paper.

At the conclusion of his lecture, Mr. Thomas, by means of drawings, gave his reasons as to why he had lost or won certain competitions.

Mr. G. H. Foggitt, proposing the vote of thanks, said that the lecturer's powers of draughtsmanship had been known to him for many years past. He felt sure that the younger members could take the advice given them as coming from one who spoke with authority.

Mr. Victor Bain, in seconding, thought that the lecturer had shown a very sportsmanlike spirit in letting them into many secrets of the game. He had no doubt that the younger members would now approach competition work in a new spirit.

Messrs. W. Alban Jones, B. R. Gribbon, hon. secretary, W. Broadbent, Harold Thornton, J. C. Addison, also spoke in support of the vote.

Mr. Thomas, in reply, advised them to approach competitions in a spirit of adventure. If they lost, they must need be good sportsmen who knew how to grin and bear it.

GLOUCESTERSHIRE ARCHITECTURAL ASSOCIATION.

A meeting of the Gloucestershire Architectural Association was held at Mercers' Hall, Gloucester, on Wednesday, 20 January, when Mr. H. T. Rainger, A.R.I.B.A. (President), occupied the chair.

Following supper, a lecture on "Architectural Lighting" was given by Mr. Waldo Maitland, A.R.I.B.A., of the Electric Lamp Manufacturers' Association of Great Britain. Representatives of the West Gloucestershire Power Company and the local branch of the Electric Development Association and other visitors were present.

The lecture was illustrated by lantern slides, and Mr. Maitland showed interesting photographs of various types of internal and external lighting, many of the examples being taken from recent theatres and cinemas; also of flood lighting of buildings, and of the Colonial Exhibition held in Paris in 1931.

Various structural and engineering details were explained.

A hearty vote of thanks to the lecturer was proposed by Mr. H. S. Ellis, A.M.I.C.E., general manager of the West Gloucestershire Power Company, and this was seconded by Mr. Stratton Davis, F.R.I.B.A.

THE ESSEX, CAMBRIDGE AND HERTFORDSHIRE SOCIETY OF ARCHITECTS

WEST ESSEX CHAPTER

The annual meeting of the West Essex Chapter will take place on Shrove Tuesday, 9 February 1932, when a most interesting programme has been arranged.

PROGRAMME.

5.30 p.m. Reception at the Lysbeth Hall, Soho Square, London, to W.C., by the Chairman and Mrs. T. H. B. Scott.
7.0 p.m. Dinner. (Wines are not included, but can be obtained.)
7.15 p.m. Visit the new Saville Theatre. The architect, Mr. T. P. Bennett, F.R.I.B.A., has kindly consented to conduct the party over the theatre.

In the evening the party will attend the musical play, "For the Love of Mike."

SOUTH WALES INSTITUTE OF ARCHITECTS

(CENTRAL BRANCH)

A particularly successful function was held in the Cardiff Technical College on 16 January 1932, when 250 past and present students of the Welsh School of Architecture and their friends were present at a dance arranged by the School of Architecture Club which is affiliated with the South Wales Institute of Architects (Central Branch). The students of the School designed and carried out a particularly effective scheme of decoration for the Assembly Hall in which the dance was held.

Membership Lists

ELECTION OF MEMBERS, 1 FEBRUARY 1932

In accordance with the terms of Bye-laws 10 and 11, the following candidates for membership were elected at the Council Meeting held on Monday, 1 February 1932:—

AS FELLOWS (15)

HALSE: SIDNEY JOSEPH, F.S.I. [A. 1901], Shanghai.
LAVENDER: CAPTAIN ERNEST CLIFFORD [A. 1918], Wolverhampton.
SKIPPER: ERIC HAYWARD [A. 1922], Norwich.

The following Associate, who is applying for nomination under the provisions of the Supplemental Charter, 1925, Section IV, Clause 4, c (i):—

KEEP: NORMAN PRISTO [A. 1916].

The following Licentiate, who have passed the Qualifying Examination:—

ANDERSON: ALEXANDER FREDERICK BERENBRUCK, S.A.D.G.
GODMAN: COLONEL CHARLES RICHARD BAYLY, Horsham, Sussex.
JACKSON: EDWIN ARTHUR, Ashford, Kent.
KAPADIA: PESTONJI PHIROZSHAH, J.P., B.A., Bombay.
KAY: CLAUDE JOHN, Horsham, Sussex.
MARGETSON: ANTHONY JOHN, Birmingham.
WOOD: WALLACE, Wolverhampton.

And the following Licentiate, who are qualified under Section IV, clause 4, c (ii) of the Supplemental Charter of 1925:—

HUDDART: ARTHUR, Whitehaven.

HURST: COLONEL GODFREY THOMAS, D.S.O., O.B.E., Durban.

MARTIN: ROBERT, Manchester.

WILSON: EDMUND RICHARDSON, Invercargill.

AS ASSOCIATES (10)

BOX: KENNETH DIXON [Final], Montreal.

GLEAVE: JOSEPH LEA [Exempted from Final Examination], Timperley, Cheshire.

HUTCHINSON: FRANK MAXWELL, Dip.Arch. Aberdeen [Passed five years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination], Inverness.

KING: MISS ELIZABETH STEVENSON, B.Sc. [Passed five years' course at the Glasgow School of Architecture. Exempted from Final Examination], Edinburgh.

MONRO: GEOFFREY JAMES, B.Sc. [Passed five years' course at the Glasgow School of Architecture. Exempted from Final Examination], Glasgow.

SALMOND: ARTHUR LOUIS, B.Arch. [Passed five years' course at the School of Architecture, University College, Auckland. Exempted from Final Examination].

STEWART: JAMES ALAN, B.A.Hons. (Arch.), Manchester [Passed five years' course at Manchester University School of Architecture. Exempted from Final Examination].

STIRRUP: GORDON, Dip. Arch. Lvpl. [Passed five years' course at the Liverpool University School of Architecture. Exempted from Final Examination], Blackburn.

WORRALL: WILLIAM [Special Examination].

WRIGHT: JOHN PHIN MILLER [Passed five years' course at Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination], Aberdeen.

AS LICENTIATES (45)

ANDERSON: GEORGE HERBERT, Norwich.
 ARCHARD: ALFRED JOSEPH HODSDON.
 BATES: EDWARD, Manchester.
 BEDFORD: OLIVER HERBERT.
 BLUNT: HARRY ARTHUR, Birmingham.
 BOLTON: JOSEPH, Liverpool.
 BUCKINGHAM: CLAUDE SOMERSET, F.S.I., Norwich.
 BUTLER: REGINALD.
 CAVANAGH: JOHN FRANCIS ANTHONY, Ilford, Essex.
 COTTON: ALBERT VICTOR, Stoke-on-Trent.
 COULSON: WILLIAM JOHNSON CLARK, Newcastle-on-Tyne.
 COVERDALE: JOHN LAWSON, Northallerton, Yorks.
 CRAWFORD: THOMAS, Middlesbrough.
 CURTIS: ARTHUR WILLIAM.
 ELLIS: HENRY ALEXANDER RADCLIFFE, Taunton, Somerset.
 FORSTER: EDWARD HAROLD, Thorne, near Doncaster.
 HULME: FRANK VICTOR, Stoke-on-Trent.
 HUSON: WILLIAM, Wakefield.
 KIRK: MAJOR ALASTAIR HOPE.
 LANGHAM: GEOFFREY DAYKIN, Leicester.
 LEE: FRANK, Nelson.
 MCCORQUODALE: CAPTAIN GEORGE MELVILLE, Marlow, Bucks.
 MACLEOD: ALEXANDER HOOD, Glasgow.
 MANDEL: CHRISTIAN ALBERT GEORGE, Accra, Gold Coast, W. Africa.
 MARSHALL: NORMAN WILFRED, Birmingham.
 MATTHEWS: HENRY, Crewe.
 MAYHEW: GEORGE MELBOURNE.
 MORTON: GEORGE CHRISTIE, Dundee.
 PARKER: ALFRED GWYNNE, Worcester.
 PARSONS: SAMUEL FRANK, Nottingham.
 PETRIE: NORMAN JOHN CHARLES, Leicester.
 PHILLIPS: EDWARD, Nottingham.
 PICKERING: HORACE GEORGE, Birmingham.
 RICHARDS: REGINALD FREDERICK, Lowestoft.
 RUDD: JOHN PEARSON, Middlesbrough.
 SAYNER: GEORGE VINCENT, Buxton.
 STOCKS: JOHN ELLIS, Leeds.
 STONE: GEORGE S. N.
 SUMNER: HAROLD GORDON.
 TURNER: CAPT. DAVID EDGAR, Birmingham.
 TWISS: WILFRED, Liverpool.
 WADE: HERBERT, Blackpool.
 WARD: HENRY DORRINGTON, Hastings.
 WILLIAMS: RICHARD BERWYN, Neath, Glamorgan.
 YOUNG: ROBERT CLIFFORD, Shanghai.

APPLICATIONS FOR MEMBERSHIP ELECTION: 7 MARCH 1932

In accordance with the terms of Bye-laws 10 and 11, an election of candidates for membership will take place at the Council Meeting to be held on Monday, 7 March 1932. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, are herewith published for the information of members. Notice of any objection or other communication respecting them must be sent to the Secretary R.I.B.A., not later than Tuesday, 16 February 1932.

AS FELLOWS (5)

DOVASTON: JOHN [A. 1912], District Surveyor for Finsbury, 378 St. John Street, E.C.1; "Little Croft," Hillcroft Crescent, Ealing,

W.5. Proposed by Stanley Towse, Arthur Ashbridge and Digby L. Solomon.

GALE: CHARLES HENRY [A. 1916], Stuston Lodge, near Diss, Suffolk. Proposed by Arthur H. Ough, Edward A. Ram and Herbert W. Bird.

WALKER: HAROLD FREDERICK, M.B.E. [A. 1915], "Thorpe Lodge," Mill Lane, Felixstowe, Suffolk. Proposed by W. R. Davidge, Professor A. E. Richardson and Maurice E. Webb.

WELCH: HERBERT ARCHIBALD [A. 1920], c/o Messrs. Freeman, Hardy and Willis, Ltd., Leicester; "Hawarden," Eastfield Road, Western Park, Leicester. Proposed by W. H. Overton, G. Hanson Sale and W. H. Hobday,

and the following Licentiate who has passed the qualifying examination:—

HOOGERP: JOHN ALBERT, Corner House, Nairobi, Kenya Colony, P.O. Box 677, Nairobi, Kenya Colony. Proposed by Harold E. Henderson, Sir Herbert Baker and Alex. T. Scott.

AS ASSOCIATES (41)

ALLEN: WILLIAM HENRY [Final], 43 North Row Buildings, Park Lane, W.1. Proposed by W. S. Huxley, W. Lee Clarke and Herbert O. Ellis.

ANDERSON: ALEXANDER ROBERT FORDYCE [Final], 4 Bingham Terrace, Dundee. Proposed by Wm. Salmond, Chas. G. Soutar and L. Rome Guthrie.

BARNES: JOHN WILFRED HERBERT [Final], 47 Ansell Road, Ecclesall, Sheffield. Proposed by W. Geo. Davies, Alexr. G. Bond and Charles M. E. Hadfield.

BEVAN: CHARLES SHERLOCK, A.A. Diploma [Passed five years' course at the Architectural Association. Exempted from Final Examination], 42 Waldemer Avenue, Ealing, W.13. Proposed by Howard Robertson, G. Wyville Home and Shirley Knight.

CARNEGIE: JOHN DENOON, Dip. Arch. Edin. [Passed five years' course at the Edinburgh College of Art. Exempted from Final Examination], 137 Warrender Park Road, Edinburgh. Proposed by Jn. Beggs, James A. Arnott and E. A. Jamieson.

DAVIES: ELIDIR LESLIE WISH [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination], 98a Crawford Street, London, W.1. Proposed by Sydney Tatchell, H. V. Lanchester and T. A. Lodge.

DOTTO: AUGUSTINE LOUIS [Final], 8 Hartington Road, Millhouses, Sheffield. Proposed by Professor Lionel B. Budden, W. Geo. Davies and Edward R. F. Cole.

EATON: NORMAN MUSGRAVE [Special Exemption], c/o The Institute of South African Architects, Exploration Buildings, Johannesburg, South Africa. Proposed by Sir Herbert Baker, Alex. T. Scott and applying for nomination by the Council under the provisions of Bye-law 3 (d).

FAIRLESS: CHARLES LATHAM, Dip. Arch. Liverpool [Passed five years' course at the Liverpool School of Architecture. Exempted from Final Examination], The White House, Promenade, Llandudno. Proposed by Professor Lionel B. Budden, Edward R. F. Cole and applying for nomination by the Council under the provisions of Bye-law 3 (d).

FAIRWEATHER: GEORGE [Final], 32 Shepherd's Loan, Dundee, Angus. Proposed by Chas. G. Soutar, Wm. Salmond and J. Donald Mills.

GILHAM: EDWARD CHARLES [Final], 70 Fellows Road, Hampstead, London, N.W.3. Proposed by Professor Lionel B. Budden, Edward R. F. Cole and applying for nomination by the Council under the provisions of Bye-law 3 (d).

HARDING: DOUGLAS EDISON [Final], 10A Red Lion Passage, W.C.1. Proposed by F. R. B. Haward, Professor A. E. Richardson and Matthew J. Dawson.

HASWELL: GEORGE JOSEPH WATSON [Final], 67 Victoria Road, Alexandra Park, N.22. Proposed by Thos. E. Scott, Charles Cowles-Voysey and Edward Maufe.

HICKS: JOSEPH KENNETH [Passed five years' course at the Architectural Association. Exempted from Final Examination], "Belmont," Church Green Road, Bletchley, Bucks. Proposed by Major John Chadwick, Howard Robertson and V. O. Rees.

- HOLDER:** FREDERICK WILLIAM, B.A. (Arch.) Lond. [Passed five years' course at the Bartlett School of Architecture, London University. Exempted from Final Examination], 6, Courtfield Gardens, S.W.5. Proposed by Oswald P. Milne, Sydney Tatchell and Geoffrey C. Wilson.
- HUDDY:** GEORGE VERNON [Final], Greenwich House, Truro, Cornwall. Proposed by Alfred J. Cornelius, Lawrence M. Gotch and applying for nomination by the Council under the provisions of Bye-law 3 (d).
- JACKSON:** GEOFFREY HART, A.A. Diploma [Passed five years' course at the Architectural Association. Exempted from Final Examination], 50 Queen's Gate Mews, S.W.7. Proposed by Howard Robertson, Louis de Soissons and V. O. Rees.
- JACKSON:** GILDART EDGAR PEMBERTON, B.A. [Final], 101 Great Russell Street, London, W.C.1. Proposed by Professor Beresford Pite, Brook Kitchen and W. H. Hobday.
- JACOBSON:** LESLIE STURMER [Final], 27 Gledhow Gardens, South Kensington, S.W.5. Proposed by John H. Markham, Hugh S. Tiffin and Charles D. Hawley.
- KERSHAW:** SIDNEY [Special Examination], 290 Turton Road, Bradshaw, near Bolton, Lancs. Applying for nomination by the Council under the provisions of Bye-law 3 (d).
- LAY:** GEORGE QUINE, B.A. (Hons.) Arch. Lond. [Passed five years' course at the Bartlett School of Architecture, London University. Exempted from Final Examination], 10, Strathfield Gardens, Barking, Essex. Proposed by C. Lovett Gill, Courtenay M. Crickmer and Chas. J. Dawson.
- LIVINGSTONE:** ALEXANDER HODGE [Final], 10 Colchester Drive, Kelvinside, Glasgow, W.2. Proposed by T. G. Gilmour, Wm. B. White and Geo. A. Boswell.
- MACDONALD:** JOHN WILLIAM [Passed five years' course at the Glasgow School of Architecture. Exempted from Final Examination], 6 Loskin Drive, High Possil, Glasgow. Proposed by Hamilton Neil, T. Harold Hughes and Geo. A. Boswell.
- MACKNESS:** ARTHUR REGINALD [Final], 18 Redland Park, Bristol. Proposed by G. D. Gordon Hake, Sir George H. Oatley and W. J. Stenner.
- MARSH:** JOSEPH STANLEY [Final], "Stanor," Wyndcliff Drive, Flixton, near Manchester. Proposed by Francis Jones, Dr. Percy S. Worthington and J. Hubert Worthington.
- MAULDON:** FREDERICK NEVILLE [Special Examination], c/o Australia House, Strand, W.C.2. Applying for nomination by the Council under the provisions of Bye-law 3 (d).
- PARSONS:** LESLIE HARRY [Final], 20 Albion Terrace, Horsham, Sussex. Proposed by F. Gordon Troup, A. H. Moberly and J. Alan Slater.
- PENN:** COLIN TROUGHTON [Final], 3952 47th Street, Sunnyside, Long Island, New York, U.S.A. Proposed by George Drysdale, John B. Surman and William T. Benclyn.
- PEPLER:** MISS MARIAN [Passed five years' course at the Architectural Association. Exempted from Final Examination], 29 Carlisle Mansions, Carlisle Place, Westminster, S.W.1. Proposed by Howard Robertson, Louis de Soissons, and V. O. Rees.
- PHILLIPS:** ROY LOVELL [Passed five years' course at the Architectural Association. Exempted from Final Examination], Gate House, Abbotswold, Guildford, Surrey. Proposed by Victor Wilkins, Howard Robertson and V. O. Rees.
- RICHARDS:** IVOR FRANCIS BASSETT [Passed five years' course at the Welsh School of Architecture, Cardiff. Exempted from Final Examination], 46 Cyncoed Road, Penylan, Cardiff. Proposed by W. Goodchild, Percy Thomas and T. Alwyn Lloyd.
- RICHMOND:** SIDNEY MARK [Special Examination], 35 Denewell Avenue, Newcastle-upon-Tyne. Proposed by R. G. Roberts, R. Burns Dick and H. L. Hicks.
- SCOTT:** WILLIAM [Passed five years' course at School of Architecture, Manchester University. Exempted from Final Examination], c/o 44, Larkspur Terrace, Jesmond, Newcastle-upon-Tyne. Proposed by John Bradshaw Gass, James R. Adamson and Fred. N. Weightman.
- SEDCOLE:** ALBERT JOHN [Passed five years' course at the School of Architecture, Auckland University College, New Zealand. Exempted from Final Examination], c/o New Zealand House, 415 Strand, W.C.2. Proposed by Professor S. D. Adhead and applying for nomination by the Council under the provisions of Bye-law 3 (d).
- SMITH:** DAVID REEKIE [Final], 8 Hayburn Crescent, Glasgow, W.1. Proposed by T. Harold Hughes, John Watson and David Salmond.
- STEEL:** ANTHONY JOHN [Final], 18 Athol Park, Sunderland. Proposed by Thomas R. Milburn, S. W. Milburn and Hugh T. D. Hedley.
- STEWART:** ARTHUR AMMERMAN [Final], 173 Gloucester Terrace, Lancaster Gate, W.2. Proposed by F. C. R. Palmer, W. F. C. Holden and Edgar Ranger.
- WATSON:** REGINALD PAXTON, B.A. Oxon., A.R.C.A. [Final], Barn Wood, Worth, Crawley, Sussex. Proposed by Sir Giles Gilbert Scott, W. E. Watson and A. Gilbert Scott.
- WESTMORELAND:** CHARLES EDWARD [Final], 17 Ravensbourne Gardens, Ealing, W.13. Proposed by A. F. A. Trehearne, R. R. Kitching and R. J. Archibald.
- WHALLEY:** JAMES MILLAR [Final], 32 Katharine Avenue, Glasgow, S.W.1. Proposed by T. Harold Hughes, John Watson and David Salmond.
- WOOD:** GEORGE [Special Examination], 45 Morley Street, Derby. Proposed by Philip Barker, Francis Jones and Martin S. Briggs.

AS LICENTIATES (30)

- BACKHOUSE:** WILLIAM SOYE, 9 Albion Street, Leeds. 5 Jessamine Avenue, Beeston, Leeds. Proposed by James Parish and the President and Hon. Secretary of the West Yorkshire Society of Architects under the provisions of Bye-law 3 (a).
- BARNABAS:** ARULIAH, 213 High Street, Kuala Lumpur, Federated Malay States; Sentul, Kuala Lumpur. Proposed by W. F. Hedges, Leofric Kesteven and F. W. Wade.
- BRINSLEY:** HERBERT G. W., M.C., F.S.I., 27 Chacon Street, Port of Spain, Trinidad, B.W.I.; St. Ann's, Port of Spain. Proposed by Sir Banister Fletcher and applying for nomination by the Council under the provisions of Bye-law 3 (d).
- BROMLY:** ALAN, F.S.I., U.D.C. Offices, Slough: "Suncroft," Bath Road, Slough. Applying for nomination by the Council under the provisions of Bye-law 3 (d).
- BRUTY:** JOHN CECIL, 6 New Square, Lincoln's Inn, W.C.2; "Fernedale," 23 MacLean Road, Standon Park, S.E.23. Proposed by Clyde Young, George W. Smith and S. W. Cranfield.
- CALLANDER:** JAMES GAVIN, 1 Newmarket Street, Falkirk; Majors Loan, Falkirk. Proposed by A. N. Malcolm, James Lochhead and Geo. A. Boswell.
- CLARK:** ARTHUR KINGZETT, 8 Suffolk Street, Pall Mall East, S.W.1; 31 The Chase, Clapham Common, S.W.4. Applying for nomination by the Council under the provisions of Bye-law 3 (d).
- COTTEN:** JOHN JAMES, 12 Hambrook Street, Southsea; Garlton House, Auckland Road West, Southsea. Proposed by J. W. Walmisley, Ingaltion Sanders and A. Leonard Roberts.
- CRUMBLEHULME:** WILLIAM LEWIS ROBINSON, Inland Revenue Valuation Department, Blackburn; 58 Langham Road, Blackburn. Proposed by Joseph Foy, Ernest J. Pomeroy and William Scott.
- DAMEN:** HUBERT EDWARD FRANK, Dudsbury Avenue, Ferndown, Dorset. Proposed by W. J. Mountain, Ingaltion Sanders and A. Leonard Roberts.
- DEAN:** NOEL, F.S.I., University of Cambridge, Department of Agriculture, Estate Management Branch, Downing Street, Cambridge; Manor House, Great Shelford, Cambs. Applying for nomination by the Council under the provisions of Bye-law 3 (d).
- DEAS:** GEORGE BROWN, F.S.A. (Scot.), Central Chambers, Kirkcaldy; "Lossiebank," Kirkcaldy. Proposed by William Williamson, Chas. G. Soutar and Wm. Salmond.
- DRAKE:** ARTHUR, 9 Albion Street, Leeds; Foreland, Spofforth Hill, Wetherby, Yorks. Proposed by Percy Robinson and the President and Hon. Secretary of the West Yorkshire Society of Architects under the provisions of Bye-law 3 (a).
- FERRIE:** JOHN HOGG, Housing Department, Glasgow Corporation, 20 Trongate, Glasgow; 19 Boulevard, Mossbank, Glasgow, S.W.2. Proposed by the late R. W. Horn, John Wilson and T. G. Gilmour.
- FLATMAN:** JAMES GEORGE, 179/189, City Road, E.C.1; 112 Church Road, Hanwell, W.7. Applying for nomination by the Council under the provisions of Bye-law 3 (d).

- GEERS: LEENDERT MARINUS, Architect to the Provincial Administration of Transvaal, Provincial Offices, Church Square, Pretoria, Transvaal, S. Africa. Proposed by J. S. Cleland, Robert Howden and D. M. Sinclair.
- HAMID: SHEIKH ABDUL, 19 Bedford Square, W.C.1; 90 High Holborn, W.C.1. Proposed by H. V. Lanchester, Captain T. A. Lodge and W. Fraser Granger.
- HARVEY: EDWARD HARRY, Pinks Buildings, 110-114, Commercial Road, Portsmouth; 2 Shirley Road, Southsea. Proposed by Lt.-Col. A. E. Cogswell, Ingaltion Sanders and A. Leonard Roberts.
- JONES: JOHN T., Great Western Chambers, Neath; Maesgarreg, Rhigos, near Aberdare. Proposed by J. Cook Rees, J. Herbert Jones and Charles S. Thomas.
- KENWORTHY: REGINALD, D16 Exchange Buildings, Liverpool; 25 Edinburgh Road, Wallasey. Proposed by Wm. P. Horsburgh, Bertram Ashworth and Arthur L. Horsburgh.
- NEWMAN: EDWARD GEORGE STEPHEN, County Architect's Department, The Castle, Winchester; 6 Stuart Crescent, Stanmore, Winchester. Proposed by A. Leonard Roberts, J. Arthur Smith and Ingaltion Sanders.
- PEGG: ALFRED L. F., Architect's Department, Durham County Council, Durham; "Wychwood," Farnley Hey Road, The Avenue, Durham. Proposed by F. W. C. Gregory and applying for nomination by the Council under the provisions of Bye-law 3 (d).
- PEPPER: CHARLES LESLIE, Housing Department, Municipal Offices, Liverpool; 16 Long Lane, Garston, Liverpool. Proposed by L. H. Keay, Duncan A. Campbell and Gilbert W. Fraser.
- PETTY: CHARLES HENRY, 12 Waterhouse Street, Halifax; Wyngarth, Greenrovd, Halifax. Proposed by Joseph F. Walsh and the President and Hon. Secretary of the West Yorkshire Society of Architects under the provisions of Bye-law 3 (a).
- PENTON: FREDERICK WILLIAM, P.A.S.I., Deputy Borough Engineer, Surveyor and Architect, Town Hall, Leigh, Lancs; 11 Beverley Avenue, Leigh. Proposed by Harry Nurse, Ernest Prestwich and applying for nomination by the Council under the provisions of Bye-law 3 (d).
- RAYMOND: GEOFFREY, 17 Wallis Road, Basingstoke. Proposed by J. Arthur Smith, Ingaltion Sanders and A. Leonard Roberts.
- ROGERS: ARTHUR LEIHRS, Architects' Department, London County Council, County Hall, S.E.1; 118 Hillside Road, Streatham Hill, S.W.2. Proposed by T. P. Bennett, Herbert J. Axten and Matthew J. Dawson.
- SMITH: HUGH, Miners' Welfare Committee, Dean Stanley Street, S.W.1; 189 Peartree Lane, Welwyn Garden City, Herts. Applying for nomination by the Council under the provisions of Bye-law 3 (d).
- STEWART: WILLIAM HINTON, M.C., F.S.I., Lloyds Bank Chambers, New Milton, Hants; "Withy Mead," Farm Lane, Barton-on-Sea, Hants. Proposed by A. Edward Shervey, J. Arthur Smith and A. Leonard Roberts.
- TIPPETTS: ALFRED WILLIAM, Architects' Department, London County Council, County Hall, S.E.1; 9 Greenside, Chadwell Heath. Proposed by E. P. Wheeler, W. T. Sadler and E. Hadden Parkes.
- Dotto, Augustine Louis.
Fairweather, George.
Farnsworth, John Edward (*Part 1 only*).
Gasson, Alfred Stanley (*Part 1 only*).
Gilham, Edward Charles.
Gordon, Henry Vincent.
Griggs, Henry Thomas Brock (*Part 1 only*).
Harding, Douglas Edison (*Distinction in Thesis*).
Hassell, Gordon Frederick.
Haswell, George Joseph Watson.
Herbert, Philip Burnell (*Part 1 only*).
Hogarth, Horace Alwyn.
Huddy, George Vernon.
Jackson, Gildart Edgar Pemberton.
Jacobson, Leslie Sturmer.
Livingstone, Alexander Hodge.
Mackay, Eric Keith (*Part 1 only*).
Mackness, Arthur Reginald.
Marsh, John David Taylor (*Part 1 only*).
Marsh, Joseph Stanley.
Midgley, Richard (*Part 1 only*).
Parsons, Leslie Harry.
Poltock, John Willey (*Part 1 only*).
Powell, Adrian Evelyn (*Part 2 only*).
Robb, George (*Part 1 only*).
Senior, Denis.
Sharpe, Albert Lawrence (*Part 1 only*).
Smith, David Reekie.
Smith, William John (*Part 1 only*).
Steel, Anthony John.
Stewart, Arthur Ammerman.
Underwood, Walter (*Part 1 only*).
Watson, Reginald Paxton.
Watson, William Irving (*Part 1 only*).
Westmoreland, Charles Edward.
Whalley, James Millar.
Wingate, Michael Melville Fenton (*Part 1 only*).

THE SPECIAL EXAMINATION

The Special Examination qualifying for candidature as Associate R.I.B.A. was held in London from 2 to 8 December, and in Edinburgh from 2 to 10 December 1931.

Of the 15 candidates examined, 6 passed (1 in Part 1 only) and 9 were relegated.

The successful candidates are as follows:—

Dilworth, Robert (*Part 1 only*).
Kershaw, Sidney.
Mauldon, Frederick Neville.
Richmond, Sidney Mark.
Senior, Harold Grazebrook.
Wood, George.

THE EXAMINATION IN PROFESSIONAL PRACTICE FOR STUDENTS OF SCHOOLS OF ARCHITECTURE RECOGNISED FOR EXEMPTION FROM THE R.I.B.A. FINAL EXAMINATION

The Examination was held in London and Edinburgh on 8 and 10 December 1931. Of the 28 candidates examined, 25 passed and 3 were relegated.

The successful candidates are as follows:—

Bertram, Elizabeth Mary.
Bird, Godfrey Vernon.
Blades, Beatrice Agnes.
Booth, David.
Brandt, Jack Bernard.
Carnegie, John Denoon.
Cavanagh, Howard Ernest Bernard.
Chitty, Anthony Merlott.
Davies, Elidir Leslie Wish.
Edmonds, Reginald.
Fairless, Charles Latham.
Fairweather, William John.
Holder, Frederick William.
Hutcheson, William Robert.

EXAMINATION RESULT.

December 1931

THE FINAL EXAMINATION

The Final Examination qualifying for candidature as Associate R.I.B.A. was held in London and Edinburgh from 2 to 10 December 1931.

Of the 119 candidates examined, 44 passed (16 in Part 1 only and 1 in Part 2 only) and 75 were relegated.

The successful candidates are as follows:—

Allen, William Henry.
Anderson, Alexander Robert Fordyce.
Barnes, John Wilfred Herbert.
Beattie, William Henry (*Part 1 only*).
Campbell, Kenneth John.
Cook, Weymouth Keith.
Day, Eric Aubrey (*Part 1 only*).

Hutchison, Robert Charles.
 Lay, George Quine.
 Ledebor, Judith Geertrind.
 Lewis, John.
 McDonald, John William.
 Marsh, Stanley George Roff.
 Martineau, Denis Frederick.
 Phillips, Roy Lovell.
 Read, Beryl Joy.
 Sewell, Dorca Charles.
 Thoms, Thomas Hill.

Notices

THE EIGHTH GENERAL MEETING

The Eighth General Meeting of the Session 1931-32 will be held on Monday, 15 February 1932, at 8 p.m., for the following purposes:—

To read the Minutes of the Seventh General Meeting held on Monday, 1 February 1932; formally to admit members attending for the first time since their election.

To read the following Paper: "The Work of W. R. Lethaby," by Sir Reginald Blomfield, M.A., D.Litt., R.A., F.S.A. [F.].

EXHIBITIONS AT THE R.I.B.A.

In connection with the above Paper an exhibition of drawings and water colours by the late W. R. Lethaby will be held in the R.I.B.A. Meeting Room from Monday, 15 February, to Thursday, 25 February, inclusive.

The exhibition of drawings and water colours by Charles Robert Cockerell, R.A., and Frederick Pepys Cockerell, now being held in the R.I.B.A. Meeting Room, will close on Friday, 12 February.

The above exhibitions will be open daily from 10 a.m. to 8 p.m., Saturday, 10 a.m. to 5 p.m.

R.I.B.A. LONDON ARCHITECTURE MEDAL 1931

The attention of members is specially called to the nomination form for use in connection with the above Award enclosed with the JOURNALS for 7 and 21 November 1931. The Jury will receive these nomination forms up to 29 February 1932, and after that date they will proceed to consider the Award for the year ended 31 December 1931.

MEMBERSHIP OF THE R.I.B.A.

THE LICENTIATE CLASS

The revised Bye-laws of the Royal Institute of British Architects have received the approval of His Majesty's Privy Council, and applications may now be sent in for membership of the R.I.B.A. in the Licentiate Class. Full information and the necessary forms will be sent on application being made to the Secretary R.I.B.A., 9 Conduit Street, London, W.1.

ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the election to take place on 9 May 1932, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 11 March 1932.

LICENTIATES AND THE FELLOWSHIP

The attention of Licentiates is called to the provisions of Section IV, Clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to

the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

OVERSEAS APPOINTMENTS

Members contemplating applying for appointments overseas are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

THE ARCHITECTS' CONFERENCE 1932

The Annual Conference of the R.I.B.A. and Allied Societies will be held in Manchester from 15 to 18 June 1932.

All Members and Students of the R.I.B.A., the Allied Societies, the Architectural Association, and the Association of Architects, Surveyors and Technical Assistants, are cordially invited to become Members of the Conference.

The functions will be to a great extent of a social character, and it is hoped that there will be a large number of ladies present as guests of Members of the Conference.

Further particulars will be published in due course.

Competitions

R.I.B.A. NEW PREMISES

The R.I.B.A. invite architects, being Members or Students of the R.I.B.A., or of the Allied and associated Societies, to submit, in competition, designs for new premises and headquarters to be erected on a site in Portland Place and Weymouth Street, London, W.1.

Jury of Assessors:—

Mr. Robert Atkinson [F.].
 Mr. Charles Holden [F.].
 Mr. H. V. Lanchester [F.].
 Sir Giles Gilbert Scott, R.A. [F.].
 Dr. Percy S. Worthington, F.S.A. [F.].

Premiums: £500 and a further £750 to be awarded according to merit.

Last day for receiving designs: 31 March 1932.

Conditions of the competition and answers to questions have been circulated to Members, or may be obtained on application to the Secretary R.I.B.A., 9 Conduit Street, London, W.1.

XTH OLYMPIAD, LOS ANGELES.

Members are reminded that works intended for entry in the architectural competition being organised by the International Olympic Committee in connection with the Xth Olympic Games to be held at Los Angeles this year, should be despatched to reach the R.I.B.A., 9 Conduit Street, London, W.1, not later than 1 March 1932, addressed to L. Rome Guthrie, Esq., c/o R.I.B.A. Full details of this competition were published in the JOURNAL for 23 January 1932.

NORWICH: NEW MUNICIPAL OFFICES

The Corporation of the City of Norwich invite architects to submit, in open competition, designs for new Municipal Offices to be erected on a site fronting St. Peter Street, Bethel Street and St. Giles Street.

Assessor: Mr. Robert Atkinson [F.].

Premiums: £500 and £700 to be divided between the authors of the next three designs in order of merit.

Last day for receiving designs: 1 March 1932.

Last day for questions: 2 November 1931.

WALTHAMSTOW: TOWN HALL AND MUNICIPAL BUILDINGS

The Corporation of the Borough of Walthamstow invite architects to submit, in open competition, designs for a new Town Hall and Municipal Buildings.

Assessor: Mr. H. Austen Hall [F.].

Premiums: £500, £300, £200 and £100.

Last day for receiving designs: 31 March 1932.

Last day for questions: 30 September 1931.

Members' Column

CHANGE OF ADDRESS.

Mr. F. MILTON HARVEY [A.] has removed his offices from Broad Court Chambers to 3 Raymond Buildings, Gray's Inn, W.C. Telephone: Chancery 8467.

MESSRS. SHEPHERD AND JELICOE have removed their office to 12 York Buildings, Adelphi, W.C.2. Telephone: Temple Bar 7237.

Mr. G. ALAN FORTESCUE [F.] has removed his offices to 30, Bedford Square, London, W.C.1. Tel.: No. Museum 6918.

Mr. B. SEYMOUR BAILEY [A.] has removed to 24 Colchester Drive, Pinner, Middlesex.

APPOINTMENT WANTED.

EXPERIENCED senior assistant desires position with a view to partnership or succession. Able to take full charge of work from inception to completion. Some capital available. Write Box 2912, c/o Secretary R.I.B.A.

PARTNERSHIP WANTED.

LICENTIATE, R.I.B.A., 38 years, energetic and experienced, requires partnership in well-established London practice. Active service. Some capital available. Reply Box 2312, c/o The Secretary R.I.B.A.

ACCOMMODATION TO LET.

FIRST-CLASS office to let near the Royal Institute. An opportunity to effect economy of rental. Very reasonable terms. Apply Box 2232, c/o The Secretary R.I.B.A.

Minutes IX

SESSION 1931-1932

At the Seventh General Meeting of the Session, 1931-1932, held on Monday, 1 February 1932, at 8 p.m.

Dr. Raymond Unwin, President, in the Chair.

The attendance book was signed by 27 Fellows (including 8 members of Council), 24 Associates (including 3 members of Council), 10 Licentiates (including 1 member of Council), 1 Retired Fellow, and a large number of visitors.

The Minutes of the Sixth General Meeting held on 18 January having been published in the JOURNAL, were taken as read, confirmed and signed as correct.

The Hon. Secretary announced the decease of:—

Frederick Millett Hammond, elected Associate 1913.

Albert Ernest Williams, elected Associate 1923.

William John Player, elected Licentiate 1912.

Henry Spencer Benison, elected Licentiate 1911, transferred to Class of Retired Licentiates 1931.

And it was Resolved that the regrets of the Institute for their loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to their relatives.

The following members attending for the first time since their election were formally admitted by the President:—

Mr. Herbert Clarke [L.]. Mr. A. G. Taylor [L.].

Captain G. M. Cox [L.]. Mr. F. E. Tudor [L.].

Sir Harold Brakspear, K.C.V.O., F.S.A. [F.], having read a Paper on "St. George's Chapel, Windsor," a discussion ensued, and on the motion of The Very Rev. D. H. S. Cranage, Litt.D., F.S.A.,

The Dean of Norwich, seconded by Sir George Oatley, K.W.A., Hon.L.L.D. [F.], a vote of thanks was passed to Sir Harold Brakspear by acclamation, and was briefly responded to.

The proceedings closed at 9.35 p.m.

A.B.S. INSURANCE DEPARTMENT.

HOUSE PURCHASE SCHEME

(for property in Great Britain only).

Further Privileges now Available.

The Society is able, through the services of a leading Assurance Office, to assist an Architect (or his client) in securing the capital for the purchase of a house for his own occupation, on the following terms:—

AMOUNT OF LOAN.

Property value exceeding £666, but not exceeding £2,500, 75 per cent. of the value.

Property value exceeding £2,500, but not exceeding £4,500, 66½ per cent. of the value.

The value of the property is that certified by the Surveyor employed by the Office.

N.B.—Legal costs and survey fees, and, in certain cases, the amount of the first quarter's premium payment will be advanced in addition to the normal loan.

RATE OF INTEREST.

In respect of loans not exceeding £2,000 5½ per cent. gross.

" " in excess of " 5½ " "

REPAYMENT.

By means of an Endowment Assurance which discharges the loan at the end of 15 or 20 years, or at the *earlier death* of the borrower.

SPECIAL CONCESSION TO ARCHITECTS.

In the case of houses in course of erection, it has been arranged that, provided the Plan and Specification have been approved by the Surveyor acting for the Office, and the amount of the loan agreed upon, and subject to the house being completed in accordance therewith, ONE HALF of the loan will be advanced on a certificate from the Office's Surveyor that the walls of the house are erected and the roof on and covered in.

NOTE.—Since 1928, over £50,000 has been loaned to architects under this scheme, and as a result over £600 has been handed to the Benevolent Society.

If a quotation is required, kindly send details of your age next birthday, approximate value of house and its exact situation, to the Secretary, A.B.S. Insurance Department, 9 Conduit Street, London, W.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expressions of the Institute.

R.I.B.A. JOURNAL.

DATES OF PUBLICATION.—1932: 20 February; 5, 19 March; 2, 16, 30 April; 14 May; 4, 18 June; 9 July; 6 August; 10 September; 20 October.

1932

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